

STATE UNIVERSITY OF NEW YORK AT BUFFALO

Department of Statistics

4244 Ridge Lea Road

Amherst, New York 14226

File  
in new  
Dec Tables  
File

→ Tom Glass  
pls read +  
return

Aug 28, 1967

Bert,

no to to BB/  
get papers  
or redundancy,  
etc.

Many thanks for the enclosed which  
you asked to be returned.

Bill and I are beginning preliminary  
discussions on the outline for the book. We  
have some ideas that we feel have  
some merit and will be a contribution  
to the effort. We have some ideas for  
titles also.

Bill is working on converting elementary  
academic problems for possible use to illustrate

Date..... 8th September 1967

Dear Mr Grad,

Could you please send me a reprint of your article "Engineering data processing using decision tables", Data Processing, VIII. Previous papers on decision tables would be appreciated.

Yours sincerely,

Computer Centre  
The Australian National University  
Box 4, P.O.  
CANBERRA, A.C.T., AUSTRALIA

Benny W. Smith

Fellow

loose narrative, tight narrative, flowchart  
and decision tables.

We see real difficulty in formulating  
analytical algorithms that will guarantee

(1) no redundancy and (2) minimum

table size. Do you have anything

on this?

Sincerely,  
Dick

**AIR MAIL**  
PAR AVION

**Air Mail**




Mr Burton Grad

87 Barnes Road

Tarrytown, N.Y.

U.S.A.



~~Tom Glavin~~ 

*please pass on*

BRANDON SYSTEMS INSTITUTE

1130 17th Street, N. W., Washington, D. C. 20036 Tel: 296-0678

*to check  
Schmidt -  
net to B Grad  
8/19.*

DECISION TABLES:  
WHAT THEY ARE. WHEN  
AND HOW TO USE THEM.

Dear Sir:

If you're not already using the decision table technique in systems analysis and programming, here is a way to begin. And if you are using the technique, here is a way to train more of your people in its use.

This useful way of stating the rules and conditions that govern a complex decision point is one that finds practical application in many of the consulting projects currently handled by Brandon Applied Systems.

Some of the stronger advocates of the decision table technique claim it's "the only right way." Obviously it isn't. And pointing out when it is the best approach -- and when it is not -- is an important subject of the new, two day seminar, Decision Tables: Principles and Applications.

Among the places where it is the right technique are those where the analyst or programmer is faced with a myriad of "if/when" situations. The technique gives him a format for charting the logic of these complex decision points, with the strong extra benefit of a built-in requirement to look at all possible alternatives at an early point in the job.

The technique is an essentially simple one, and we make an effort to keep it that way in this seminar. Less than half of the two days is spent in lecture. The balance is devoted to exercises that give the student a chance to test his understanding of the subject, and to obtain the familiarity with it he needs to make practical application of it.

That is the major objective of the seminar. Three important secondary benefits covered involve decision tables and:

- . Documentation
- . Communication, and
- . Compilers

Because it is a complete, readable statement of the problem, the decision table makes an obvious contribution to documentation, and to communication in the sense that it is a statement that today's programmer can write and tomorrow's programmer can read.

The use of decision tables in communication with the management user of data processing is another interesting field. It makes it possible for the user to examine the analyst's or programmer's statement of the problem and discuss it in direct, meaningful terms.

The statements in a decision table are made in a form closer to programming language than most others, and are that much closer to the desired end result. This is even more so in the case of languages with "if" and "when" statements. The next step, the compiler that accepts a decision table as input, is now coming into being, and this important new development is also touched on during the seminar.

Two sessions of the new, two day Decision Tables: Principles and Applications seminar will be conducted in September:

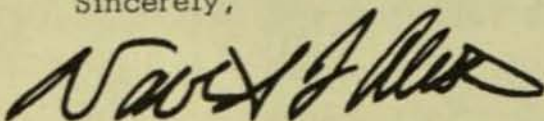
September 14-15:           At the Linden Hill Hotel in the  
Washington, D.C. suburb of  
Bethesda, Maryland

September 21-22:         At the Hotel St. Moritz in  
New York City, New York

The registration fee, including course materials and luncheons, is \$150 for one student, and \$100 each for one or two additional students from the same organization.

We have found the decision table technique of significant value to the work of our own programmers and systems analysts. Knowledge of this simple, useful technique can be of similar benefit to those in your organization. Why not give this course your serious consideration?

Sincerely,



David F. Alison  
Director

File:

Dec Table "Book"  
my desk -  
left hand drawer

DECISION LOGIC

Purpose: "Decision Logic" is aimed at the systems analyst, computer programmer, engineering or technical student, business administration student, or data processing management to teach them a better methodology for defining and communicating the rationale of decision making processes.

Chapter I -- Introduction

The initial chapter will trace the history of decision making processes and relate this to the use of unit record and computer equipment. It will show the span and scope of decision making and decision logic as it relates to business activities. In effect, this chapter will answer -- Why is the book necessary? Why should one be concerned about decision logic? This chapter will also begin to introduce some of the terminology we will be using later on in terms of the kinds of documentation one uses in developing, recording and communicating the rationale of decision making processes. It will discuss who are the decision makers. It will describe some of the intercommunications necessary within a business environment -- both <sup>to</sup> define and to implement decision processes. Various simple examples will be used in this chapter to show decision making in home situations, in personal decisions, as well as in scholastic and business environments. This should be a

relatively free formed, non ~~tutorial~~ chapter.

There is no current material that we have produced that addresses itself specifically to these questions. This will need to be prepared. Hopefully, we can achieve a tone or style not too dissimilar from Bross or from the "analytical engine" by Jeremy Bernstein.

## Chapter II -- Tools, Techniques, and Methods

This chapter will cover the various techniques that have been followed in describing and defining decision processes. This would include standards, procedures, instruction manuals, user guides, operator manuals, programs and procedural statements including comments and annotations, flowcharts, ~~in~~ narrative form, <sup>and</sup> decision trees. It probably will be organized from least sophisticated to most sophisticated, or in some sense historically from those things that had been used by the old systems and procedures analyst types to the things that are used today by the advanced operations researchers. The approach would be to have a series of sections each one devoted to the concept and use of one of these techniques and describe some of its strengths and weaknesses, and possibly, ~~show~~ through an actual example in the text, explaining what the major elements are of this technique. This would not be a detailed reference chapter which would tell you exactly what every symbol stood for in a flowchart, or every different kind of comment card you had, or all the different procedural statements that were available within a



language like COBOL. However, it would be a way of comparing and relating the different documentation techniques that one has available for describing these decision functions. We have a choice in this chapter as to whether we introduce decision tables at all. My guess would be that we leave it out and only bring it up at the very end of the chapter as we indicate that among all the things that have been done, one of the major weaknesses is the inability to define complex decision processes with these techniques. Another item that might be included within this chapter is a brief description of the use of *Boolean* Algebra <sup>and</sup> or of *Truth* tables. This might provide a reasonable lead-in to the decision table concept. The tone now of this chapter becomes that of an overview teaching nature. It is not an attempt, however, to teach the principles of flowcharting. When the person is done <sup>reading</sup> routing this, he will not be able to flowchart, but he will be able to understand why one should flowchart.

Here again, we do not have existing material which covers this area very well. However, I understand that you have done initial drafts of items in these areas. These would have been subjects you were going to cover within your originally planned book.

### Chapter III -- A Decision Table Tutorial

Each of the major functions of a decision table would be explained, together with its structure, in a step by step fashion -- building from simplest to more complicated. This would be done <sup>in</sup> <sup>slowly</sup> one or two

or three ideas will be presented through an example so that the individual would have a chance to have worked through the idea along with the material in the book. We would probably use the DTL language as the base, and probably follow the outline as written in DTL. This may be too complicated and, as an alternative, we should consider the possibility of using the language as defined in the 1401, or 7080 Decision Table Processor Manuals.

(This, of course, exists in four or five different guises already. The question here is simply one of choosing which guise we were to pick up. We think the examples have been well tested, well thought through; we know that they will look well in classroom situations.)

#### Chapter IV -- The Use of Decision Tables

There will be a series of examples and then general summaries from these examples relating to three major kinds of usage of decision tables. The first area would be what we would call management analysis or complex decision analysis. This is where a problem requires considering a number of factors wherein result may be a fairly simple management decision but that all the different alternatives and combinations of conditions which would help determine which alternative to follow must be examined fairly and carefully. We have done some examples recently in determining whether programs should be available under various size

machines and what delivery dates we might have on particular programs that we could reconstruct for this ~~for~~-this purpose. The second section of this chapter would relate to use of decision tables for non-automated procedures. This would involve the design of these procedures, the documentation of the procedure, the instructing of clerical administrative employees in the use of this procedure, and the use of the decision tables for reference purposes in the implementation <sup>and</sup> operation of the procedure. For example, work in an insurance office in the initial handling of insurance applications, instructions to keypunch operators might also follow this form. Certain bank operations or handling of stock certificates follow a similar pattern. The filling out of forms by people can follow this kind of pattern. The U. S. Government has done work like this which we have seen written up, as has <sup>an</sup> insurance company out in the Midwest. In other words, the <sup>Systems</sup> existing <sup>Systems</sup> and procedures work <sup>related to</sup> which is a great deal of clerical <sup>work</sup> administrative work <sup>work</sup> still being done could benefit significantly from the use of decision tables in those applications. The third section, of course, would be the use of decision tables in conjunction with computer processing. Here we need to be concerned about three steps. Initially, the step of design working out the decision logic needed to solve a particular problem that was going to be automated. Secondly, we'd be interested in the detailed definition <sup>of</sup> ~~of the flowchart~~ for the precise logic to be followed. This would be

getting very close to a COBOL level. The third, of course, would be the concern with actually converting these tables into operational code. I think we would end the chapter by simply opening that last issue up as to the possible direct solution of the tables and then leave that for the next chapter to address. We have many examples, of course, in this latter area of problems in which decision tables have been used. We could use the <sup>ADE (Automated)</sup> aid of design engineering); we have the work that the ~~an~~ inventory control. we have a number of other problems that we've used in our books. It will be my <sup>wanted</sup> ~~fault~~ <sup>thought that we would</sup> ~~if we will~~ not have a large extensive example here, but rather take a relatively simple straightforward example or two that shows how the tables fit together and work together as a system.

(We have extensive example material in the various manuals that we've written which would apply to the third section of this chapter. There is some material available in the second section that we could pick up. The first section will require new work to be done. I would guess that about half of this chapter would need to be written.)

#### Chapter V -- Applying Decision Tables to Computers

The main <sup>Thrust</sup> ~~zest~~ of this chapter is to describe how one can take a decision table and provide for automated solution of this table so that operational problems can be solved. We plan to operate this chapter around the 360 Decision Logic Translator Program. This could provide a focus

and a specific language which could then be used for classroom examples and work with computers. This should be an attractive aspect from a college standpoint. I would like to also add in this area some of the ideas about different ways people have approached the computer solution of decision tables from an interpretative concept to direct storage of the decision table itself to various kinds of conversion mechanisms that have been used (at a simple level).

(I would assume we could pick up material from the previous DLT Manual or the current one and get permission from IBM to use this material. We would probably have to actually work through a couple of examples though using machines. Maybe, however, we could use a sample problem right out of the DLT Manual.)

## Chapter VI -- Advanced Decision Table Concepts

We would like to discuss more complex ideas that have been introduced in decision tables over the past five years. This will include concepts related to methods of implementation of decision tables which would produce optimal code. Work has been done here on the use of dynamic programming techniques for handling up to nine sets of conditions. Other work was done in terms of heuristic approaches to providing optimal and near optimal solutions. Other techniques have been written

up in ACM to minimize the amount of space required or to minimize average <sup>path</sup> pass lengths. Other items that would be discussed here would include different ways one could use a decision table, <sup>like</sup> such as in the treating it from a sequential standpoint <sup>such</sup> that each succeeding column depended upon having gone through the preceding column. Therefore, certain information might be eliminated knowing the pass that one had come from. Another concept has been the use of "or" conjunctions within the decision tables or for the entire table. For example, in handling edit routines the <sup>or</sup> concept leads to a more efficient use of decision tables than the present "and" concept. There have been a number of other such ideas which we have <sup>been</sup> described and could be brought together here in this chapter. To close the book then I believe the last section of this chapter should try and put decision tables back into focus in relation to the other techniques and tools that we described and discussed and show how they can be used to augment and be a part of a total situation or how they can be used on a stand alone basis to carry out certain activities. One might also include at this point how to go it alone, some discussions on preparation of one's own compilers, setting up educational courses or training for people, analysts or programmers who are going to be using decision tables, methods of getting it started within your own facility, ~~this type of thing.~~

(Quite a bit of this material is available, although not in as good form as the earlier material in chapter III or chapter IV. There is a good deal of unpublished material here that we could draw upon which will be new as well as picking up various published material and bringing out the most *salient* features of it.)

## Chapter VII -- Appendix

A number of appendices might be supplied to add additional meat to the book. This could include a teacher's guide, significant questions and answers, a reference appendix on flowcharts, a reference appendix on decision tables, and a particular decision table language <sup>for</sup> to look up use; and extended example might be included here, including maybe a sample problem for computer use. A bibliography would be certainly valuable in an area such as this and I think that a small glossary might be useful. In this appendix we actually could use material from a manual prepared in detab-x which had a whole series of fill-in type problems set up. We could use these as a part of this question and answer area. I think there is quite a bit of this material, in an area we have not explored at all, in the detab-x manual which is available and I'm sure permission to reprint could be obtained. It may be released as detab under jug auspices. This is available as a COBOL program. We could give instructions on how to obtain this as part of the book. We would have to check to make sure this runs on the 360 so that it would be of current use. One other possible appendix might be a brief history of decision tables

and how they came about. We have that information available also.

{ (The material for these appendices is pretty much in hand today and an awful lot of it is simply a matter of picking up existing material and cleaning it up to some extent to put into the appendix.) }

B GRAD

TB ELAN S



JUN. -6 1968

June 5, 1968

Dear Burt,

There may be some poor typing, etc, but I am composing as I go along on my new selectric.

Enclosed please find the outline of our proposed book, DECISION LOGIC. With the exception of the decision table compiled language, this is quite like the book that Bill and I had tentatively planned about four years ago. When you mentioned the book possibility stressing only Decision tables, we were very interested, and still are. However, as we went through the material *you sent* we were irresistably drawn to the feeling that a coverage of the four forms of decision logic ~~XXXX~~ was appropriate--narrative form, flowchart form, decision table form, and procedural statement form. X

The things we discussed first <sup>en</sup> centered on our goals for the book. We feel that a book limited strictly to decision tables would be for the audience of systems ~~xxx~~ analysts primarily--a potential market of possibly 100,000 of which we might get 25% to 40%. We do not think that other markets will be attracted greatly. On the other hand, a ~~xxxxxxx~~ total market made up of analysts, managers, and supervisors could be several million. If we got but 10% here, we might be able to get over the 100,000 mark in sales, a factor larger by 4 or 5.

We look upon this area as one in which the supervisors and managers are in critical need of help in this age of specialization of systems work. At present, what can ~~the~~ the analyst suggest ~~xxx~~ to the supervisor or manager to help bridge the communication gap between the systems people and the operating people? It is our hope that both sides will be attracted to ~~the~~ material in the book and both can benefit mutually.

To help form the framework, I have prepared two figures. In Figure 1 we see the manager or supervisor looking over the area in which he has responsibility and influence. He sees the random phenomenon (actually a great many), the alternatives, and the outcomes. Bross' book on the Design of Decision was written to explain the statisticians' role

so that the ~~decision~~ decision maker would understand the problem of looking at a random phenomenon, could identify random variables that are of importance in decision making, could relate them to outcomes, and then ~~we~~ could systematically plan a series of actions for each combination of conditions in order to maximize, minimize, or optimize something. The book never attempted to tell the decision maker how he could communicate the knowledge to the people (or computer) in order to ensure that the proper actions will be taken for given sets of conditions. Here is where management and supervisors need help, also. In fact, there is a great gap between these people and analysts, a gap which has been talked about for many years but really is growing wider rather than being bridged over--something we could hope our book would accomplish.

Bill and I feel that this book, even with all four forms, will still be a fairly small book and still we <sup>could</sup> say all that need be said about each form.

We hope you and Tom will have time to give it some review and will then come back with your ideas in the matter. Bill and I are quite willing to go either way--based on the enclosed outline or based on a book devoted strictly to decision tables. If we go the prior way, we should like to suggest that the author listing be in reverse alphabetical order, but that if the book is strictly on decision tables that it be in the usual order.

We hope that you both are able to let us know your ideas in the near future as this is the only time I have to devote to concentrated work in this area. *Early in Sept,* ~~on Sept~~ I begin <sup>the</sup> ~~the~~ school year and even though that is some time off, there is no time to lose if we are to get the book done by then.

Best wishes.

Sincerely yours,

*Sick*

(At least the first complete draft)

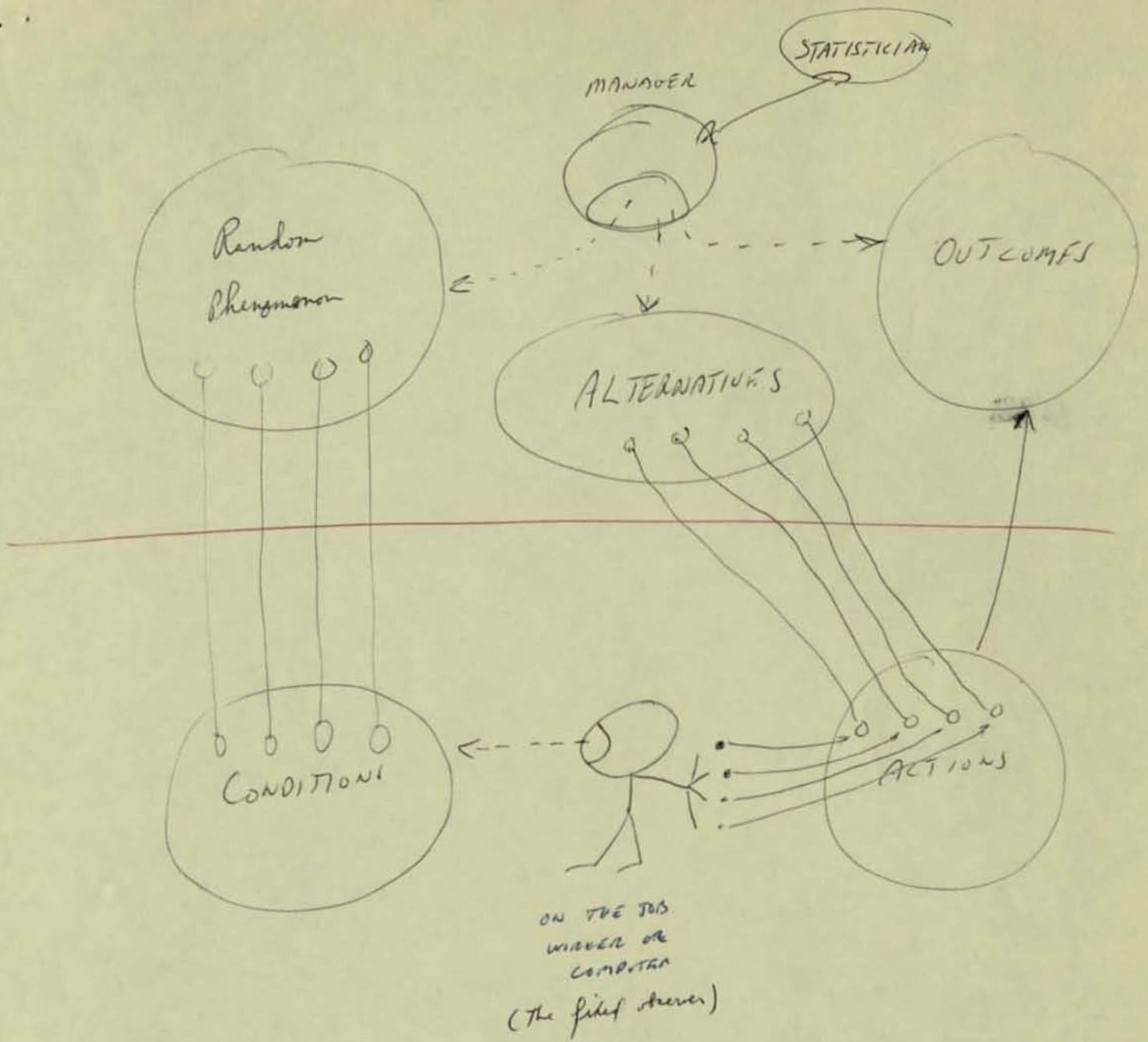


Fig 1. The statistician telling the manager how to look at a random phenomenon and how to select alternatives in order to maximize, minimize, or optimize something - a stochastic system. Boss is concerned with things above the red line.

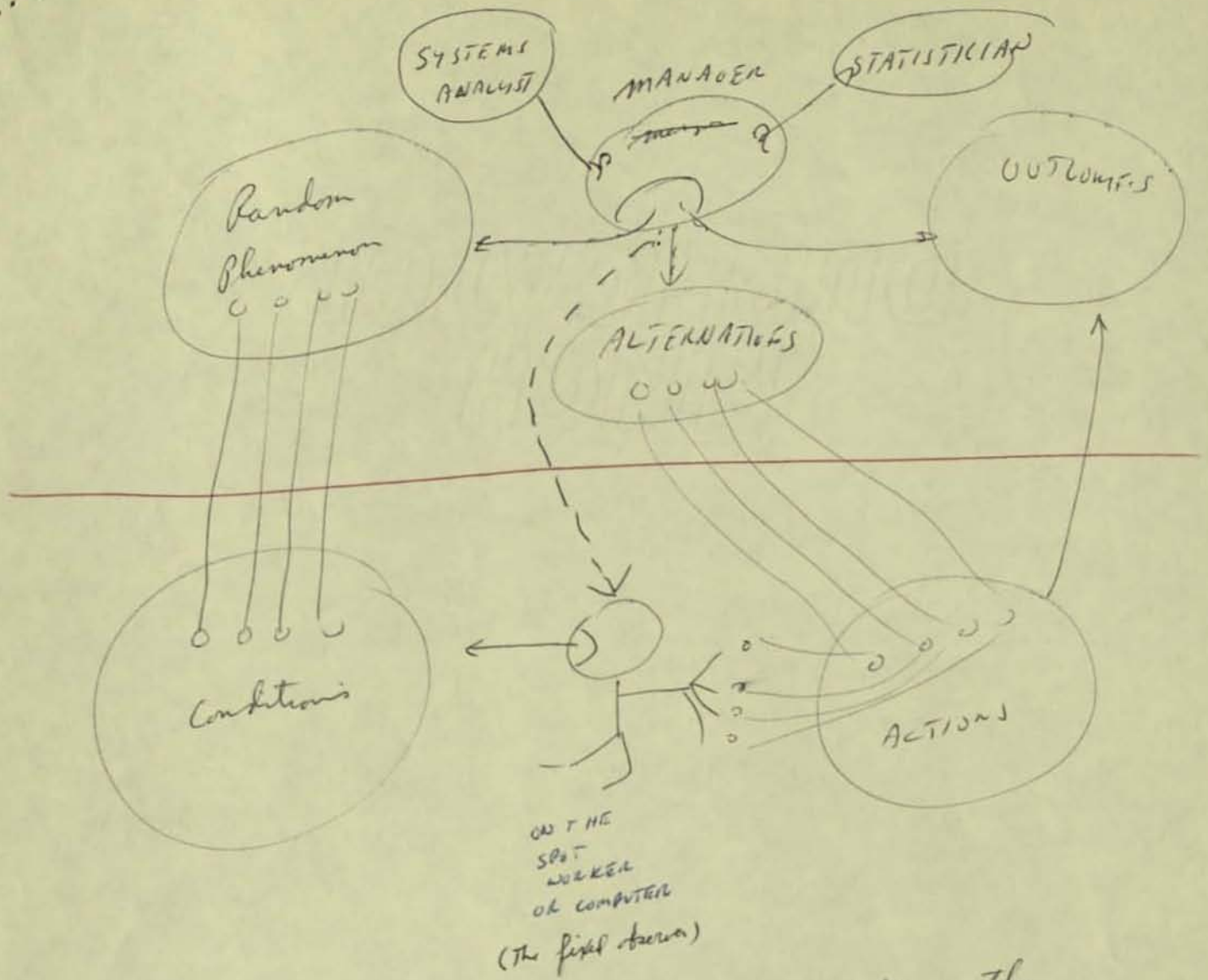


Fig 2. The systems analyst telling the manager how he should communicate the information about conditions and actions to the worker or computer - a deterministic system.

We are concerned with things below the red line.

A proposed outline for

Decision Logic

1. If...Then

- 1.1 Definition of decision logic
- 1.2 The concept
- 1.3 Conditions and actions
- 1.4 Behavior
- 1.5 Communication
- 1.6 Representation of decision logic

2. Conditions and Actions

- 2.1 Introduction
- 2.2 Principle of the fixed observer
- 2.3 The role of probability
- 2.4 Role of the statistician

3. Narrative form

- 3.1 The meaning of narrative form
- 3.2 The importance of narrative form
- 3.3 Oral narrative
- 3.4 Written narrative
- 3.5 Loose narrative
- 3.6 Narrative logic
- 3.7 Need for better communication

4. Flowchart form

- 4.1 Flowcharts
- 4.2 System flowcharts
- 4.3 Detailed flowchart example
- 4.4 Meaning of the steps in the flowchart example
- 4.5 Flowchart symbols
- 4.6 Classification of symbols
- 4.7 Direction of flow
- 4.8 Terminal
- 4.9 Operations
- 4.10 Decision making
- 4.11 Fixed Connectors

- 4.12 Variable connectors
- 4.13 Interpage connectors
- 4.14 Process variation
- 4.15 Status
- 4.16 Flexibility of Flowcharts

5. Flowchart examples

- 5.1 Introduction
- 5.2 Preparing the senior list
- 5.3 Graduation list
- 5.4 Hour limit
- 5.5 And also if
- 5.6 The four types of situations
- 5.7 A,B,C problem without equalities
- 5.8 A,B,C problem with equalities

6. Decision table form

- 6.1 Introduction
- 6.2 Decision table example
- 6.3 Discussion of the example
- 6.4 General structure of decision tables
- 6.5 Types of decision tables
- 6.6 Limited entry
- 6.7 Extended entry
- 6.8 Combined entry

7. Decision table examples

6.1 to 6.8 are repeated here

8. Case illustrations

In this chapter we will present 10-15 illustrations with (a) the narrative form, (b) the flowchart, and (c) the decision table. Relevant discussion will accompany the illustrations. We close by relating the previous three forms as the interface with the procedural statement form.

## 9. Procedural statement form

- 9.1 Introduction
- 9.2 Computer interface
- 9.3 Procedural statement example
- 9.4 General structure of procedure statements
- 9.5 Types of languages
- 9.6 Machine oriented language ( machine language and assembler language)
- 9.7 Procedure oriented language (Fortran, Cobol, Algol, PL/L)
- 9.8 Problem oriented (RPG and Tabular)

## 10. Procedural statement examples

### 9.1 Introduction

9.2 From 9.2 on we present what examples we can get to <sup>or</sup> ~~portray~~ the final link between conditions ~~and~~ and actions. We can bring in procedural ~~and~~ manuals for human beings, but will stress the computer. Hopefully, the booklet H20 0492 ~~Decision Logic~~ ~~Translator-360~~ Decision Logic Translator-360 will suffice for this chapter. However, we may want specific examples from above to be compiled, especially the A,B,C problem.

2/2/68 LEFT Thank you message FOR MRS. HARRIS  
SENT Reminder TO Joe DiDomenico

SOP

February 2, 1968

Mr. Myles J. Connell  
The Connecticut Mutual Life Insurance Company  
140 Garden Street  
Hartford, Connecticut 06115

Dear Mr. Connell:

IBM has prepared a series of manuals which define an approach and methodology for conducting systems studies. The titles and form numbers for these manuals are as follows:

	<u>Title</u>	<u>Form No.</u>
1.	IBM Study Organization Plan -- The Approach	F20-8135
2.	IBM Study Organization Plan -- The Method Phase I	F20-8136-0
3.	IBM Study Organization Plan -- The Method Phase II	F20-8137
4.	IBM Study Organization Plan -- The Method Phase III	F20-8138
5.	Basic System Study Guide	F20-8150

This material is available through your local branch office:

Mr. L. R. Oberg  
Hartford B/O #008  
1049 Asylum Avenue  
Hartford, Connecticut 06105

(203) CH 9 - 8301

In addition, the forms noted in the Documentation Techniques Manual are also available through IBM.

Sincerely,

Burton Grad  
Manager - Development Staff Services

BG/nt  
cc: Mr. L. R. Oberg



1/30/68

Mr. R. Y. Cadwallader:

Bob, we cannot ascertain what the attached letter is about, or who should handle it. I'm concerned about providing a response as soon as possible. Do you think the Hartford office should handle?

J. P. DiDomenico

January 8, 1968

Systems Engineering Services  
IBM Data Processing Division  
White Plains, New York

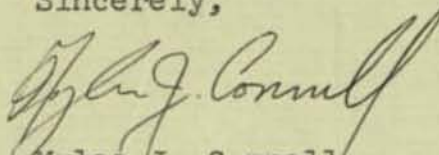
Gentlemen:

Your 1961 brochure "Reference Manual-Study Organization Plan-Documentation Techniques" provides useful direction on how to display information about work flow once that information has been gathered.

Has IBM produced any material complementary to that brochure on forms and techniques to be used in the preliminary gathering of such information? If so, please inform us of the additional literature and advise us on obtaining it.

Thank you.

Sincerely,



Myles J. Connell  
Comptroller's Department

MJC:cg

Faculty of Natural Sciences and Mathematics  
STATE UNIVERSITY OF NEW YORK AT BUFFALO

Department of Statistics

4244 Ridge Lea Road  
Amherst, New York 14226  
Telephone 831-1131  
Area Code 716

Jan 10, 1968

Mr. Burt Brad  
IBM  
White Plains, N.Y.

Pat ←  
let's handle  
AS 1/15

Copy -  
Glaus

orig -  
see index  
Book 4

Dear Burt,

Here are the two copies of Butodale,  
Phase I and II.

We hope all is going well.

Bill has completed the chapter on  
introduction to flowcharts. I am revising  
it and writing the first chapter - on communication.  
Progress is slow as I am involved in the  
plans for the new Campus and several other  
projects. However, we are making some progress,  
albeit slowly.

Best Wishes  
Dick Schmidt

744  
8/25  
SOP-  
5/17 5/17  
F

July 20, 1987

Mr. Richard N. Schmidt  
131 Lamont Drive  
Buffalo, New York 14226

Dear Dick:

The fellow at AT&T who was interested in decision tables is:

P. S. Thornton  
Bell Labs of Canada  
Business Info. Sys. Dept.  
10th Floor  
1030 University Street  
Montreal, Canada

I am still trying to track down the name of the fellow at Con Ed. \_\_\_\_\_

Mr. Thornton has made various presentations to the IBM GUIDE Users Group concerning the value and need for decision table processors.

Sincerely,

B. Grad

BG/slj

(2)

July 13, 1967

Mr. Richard N. Schmidt  
131 Lamont Drive  
Buffalo, New York 14226

Dear Dick:

We sent you the education manual and I hope you have gotten it by now. If not, let me know and I will order another one.

I have been extremely busy and have not been able to prepare the questions on Chapters 14, 15, 16, and 19 which I had promised. If you can go without me on these it would be a big load off my back. Please call if this is going to be a significant factor and I will try to do the job this coming weekend.

Your outline and listing of figures look very good. I think that it would be a good idea to list the figures in the front of the book, but that is between you and Seib.

The best source of names for material on decision tables would be Sol Pollack of North American Aviation, Inc., Los Angeles Division, International Airport, Los Angeles, California 90009. I will look at our files and let you know the names of the fellows at Con Ed and AT&T Long Lines.

As I mentioned before, I will be on vacation the first two weeks of August. You can give Tom Glans a call if you have any items that need coverage.

Sincerely,

B. Grad

BG/jb

cc: Mr. T. B. Glans

College of Arts and Sciences  
STATE UNIVERSITY OF NEW YORK AT BUFFALO

Formerly The University of Buffalo, Founded 1846

Department of Mathematical Statistics

July 1, 1967

Crosby Hall  
Library Circle  
Buffalo, New York 14214  
Telephone 831 - 2333  
Area Code 716

Mr. Burt Grad  
IBM  
White Plains

Dear Burt,

copy 5  
Tom Glavin - ✓ sent 1/6  
see item 3  
As 7/6

This letter contains several topics which I shall number 1,2...

1. Many thanks for the booklets in the E20 series. They will (or have) prove (d) useful in completing the solutions manual. All we need now to bring it to a conclusion is the new outline you mentioned is currently being used for SOP, or at least the systems short course, and the questions from the few chapters we mentioned in our phone call last week. After we get these, I plan to go through the manuscript for a final check through for continuity, consistency, and addition of questions and problems in those areas where we might be a bit thin. In some chapters we have quite a few questions and problems and I am going to take some of them and put both questions and answers in a special general section for the instructor's use solely. Any suggestions are welcome. Then we plan to get it typed and send you a copy for final review and approval.

Ed  
Manual  
14, 15, 16  
19

2. Enclosed please find an outline and a listing of the figures. I plan to suggest to Seib that the table of contents be in the form as herein. I think it makes an impressive set of topics. What do you think? I was also going to suggest the figures also be listed in the front of the book. What do you think?

Looks good  
Seems reasonable

3. The material (both the package and the separate article from THE TOOL AND MANUFACTURING ENGINEER) on decision tables arrived and Bill and I went over the material in the package for the evening prior to his leaving on his vacation. Needless to say, we were very impressed. It happens that Bill and I had long talked of the need for a book in logical analysis and flowcharting and had tentatively decided to write such a one "when we got the time." We had discussed the place decision tables would play in the book but up until recently we had only thought of this topic as a chapter. However, it is clear that decision tables could occupy a book completely. As one outcome of our discussion we wondered of the feasibility of a book with the ~~xxxxx~~ title something like DECISION LOGIC and include an introductory section on the theory of logical decision making (as apposed to statistical decision making, Bayesian decision making, and the like), the logic of problem solving, narrative forms of communicating logical

decisions, flowcharts for communicating logical decisions, and decision tables for communicating logical decisions. A last section could cover abstract aspects of programming languages for communicating logical decisions.

At present Bill and I only have an academic acquaintance with decision tables. To go more deeply into the subject so we could make a contribution from knowledge ~~xxxxx~~ (which is the only way we feel would be appropriate) we plan to begin to use decision tables in some of the programming and systems work we are doing. This will give us actual experience with flow charts vs. decision tables ~~in~~ under real working conditions.

CK  
files  
-  
[ You mentioned Con Edison and ATT long lines as using D.T. Could you get me the names, addresses and telephone numbers ~~of~~ of the main people interested. I can get in contact with them for more information. Also I think I will write to the two fellows in the article to get some more detail.

We hope all is well with you gentlemen and that you enjoy a pleasant fourth of July.

Sincerely yours,

*Dick*

Richard N. Schmidt

WESTON BOND

New Personal  
Folder -  
[ Decision Tables Book ]  
JH  
JH  
(E)

June 21, 1967

Mr. Richard N. Schmidt  
131 Lamont Drive  
Buffalo, New York 14223

Dear Dick,

As we discussed on the telephone the other day, I have put together some of the available Decision Table material. I have sent it to you under separate cover, since it is quite a thick package.

Certain of the items are in the public domain like Preliminary Specifications for Decision Table Structured Language, with its associated Decision Table tutorial - Items 1 and 2. Others are regular IBM publications like items 3 and 4; others are papers prepared for publication like 5 and 6, while some manuals have never been released except on a limited basis like items 7 and 8. I have also included item 9 - Automated Design Engineering education guide - to show some of the application material that would be available to assist in preparing an instructor's guide.

In approaching this subject I would suggest that you read items 3 and 6 first. Item 7 would probably be the basis for a book. It is a generalized language with an extensive set of examples introducing the key language characteristics. In addition to the material being sent, we have additional manuals on 7080 decision table processing and another one on the 1401.

Neither Tom nor I have yet decided whether this is worthwhile, but it is our feeling that the market could be quite substantial, possibly 30 to 50 thousand copies. I think the book would have to go for a price of six to eight dollars a copy, though this may be too low a figure. It is my feeling that the emphasis should be on a tutorial approach with lots of examples. Most recently I have heard that Con Edison and AT&T Long Lines are actively using Decision Tables. We could approach this either as a documentation language or as a programming language.



Mr. Richard N. Schmidt

- 2 -

June 21, 1967

Please give me your reaction after you have had a chance to glance through the material. If you think you would be interested, Tom and I will be glad to discuss it further.

Sincerely,

E. Grad

BG/pt

cc: Mr. T. B. Glans

File  
(Main file) (F)  
Dec Tables -  
General

September 21, 1967

Mr. Barry W. Smith  
Computer Centre  
The Australian National University  
Box 4  
Canberra, A. C. T., Australia

Dear Mr. Smith:

Enclosed is a copy of the article "Engineering Data Processing Using Decision Tables." If you are interested in receiving copies of the other publications referenced in this article, please contact the authors directly.

Thank you very much for your interest in the subject.

Very truly yours,

B. Grad

BG/pt

Enc.