

## INFORMATION HANDLING IN TECHNOLOGICAL PRODUCT PREPARATION FRAME BY MEANS OF DATABASES USING

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### ABSTRACT

Information concerns about production process have to be by suitable way handling in design stage. The analyse stage with goal of process optimization is intersection the empirics and exactness. The rational using of this intersection is also nowadays found by optimal computer support with aspect to databases using.

**Keywords:** information handling, database, technological product preparation

### 1. INTRODUCTION

The data treatment in frame of pre-production stages is also conditional by their volume/type/. These characteristics are reflection of the solved problem kind in TgPP area. For that, it is necessary the choice of criterions according to the opinion process for getting optimal data treatment tools.

### 2. BRIEF VIEW OF DATA HANDLING

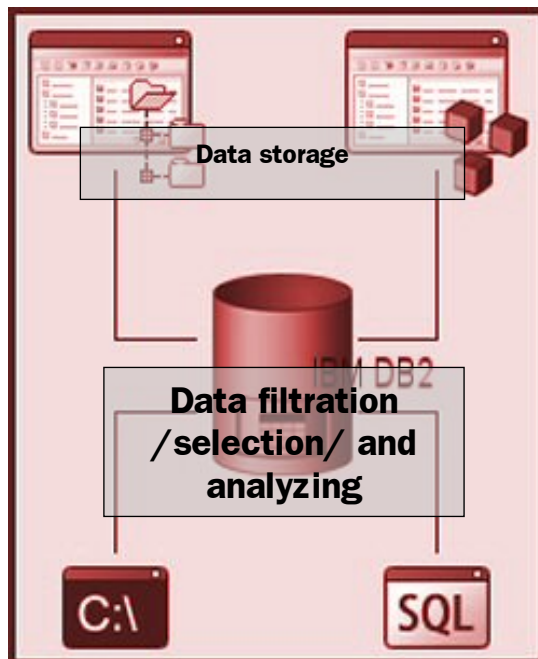


Figure 1 Data management

The choice of optimal tools for data handling is important matter in pre-production stage of TgPP.

The handling /filtration, selection/ of data can be realized by special tools /e.g. SQL language/, which both can be or not can be the integrated part of used systems/ IBM-DB, Oracle, InterBase, MS ACCESS, MS EXCEL, ..../.

The selection can be think of specific analyse of similiary information groups with aim to find alternative, which is fulfil of criteria / alternative with the highest weight of truth, confidence, etc/.



### 3. BRIEF VIEW DATA TREATMENT BY EXPERT SYSTEMS

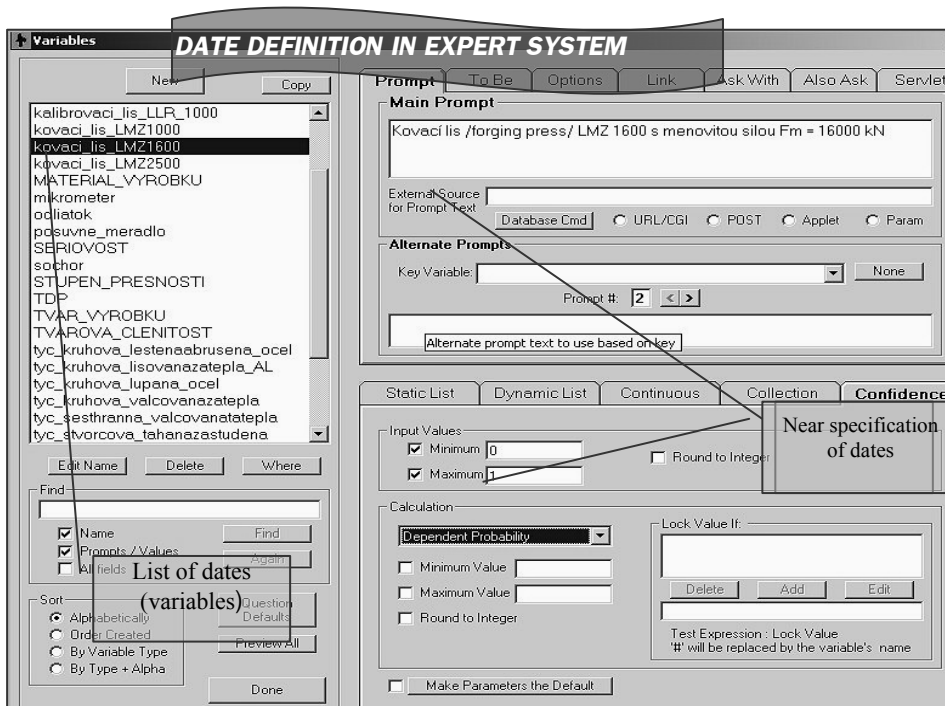


Figure 3. Example of data definition in Expert system

Application of expert systems in stage of TgPP is calculated problem. The suggestion can be different. Each problem in this area demands the variant approach. The important task is rules definition (for simulation of human thinking). It is practical algorithmisation of analyse (evaluation) information gained from knowledge base (database, user inputs ...).

Common writing of rule can be:

$$f((p_1, \dots, p_n), (vp_1, \dots, vp_n), (d_1, \dots, d_n), (vd_1, \dots, vd_n)), \text{ where}$$

p – assumption, vp – assumption weight, d – implication, vd – implication weight.

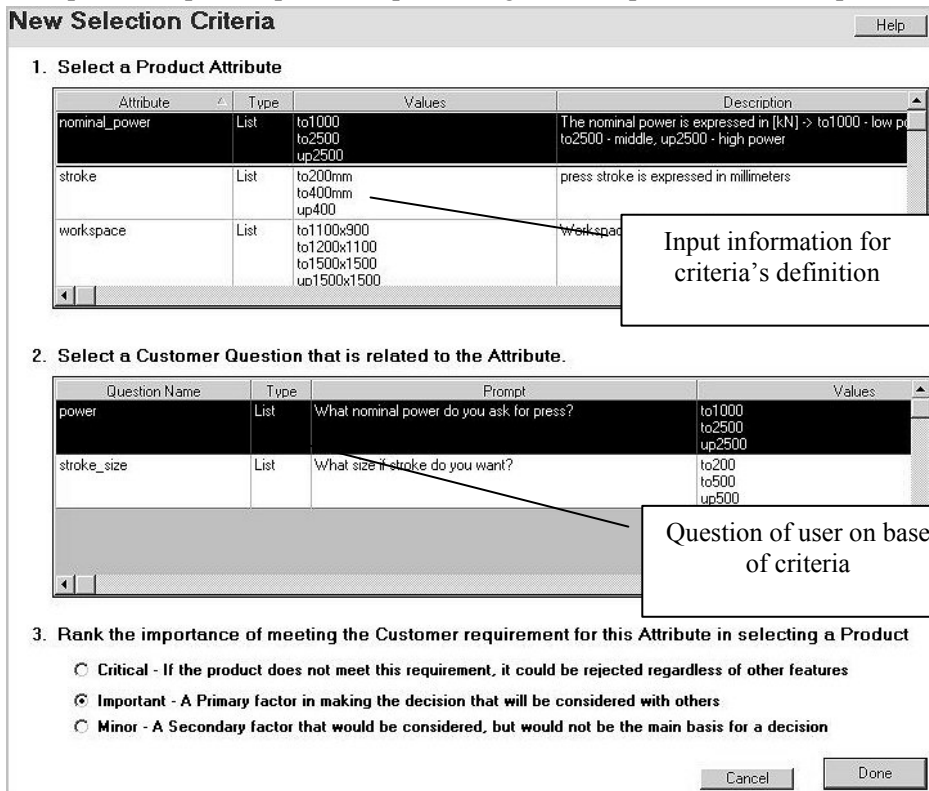


Figure 4 Example of criteria creation

Expert system application is can review of more than one facton. For example in term of work force reduction, potential mistakes elimination, in frame of routine works, respectively of intersection these matters. Very important is the examination of primary investment of ES set.

#### 4. CONCLUSION

Data handling is important part of activities in technological preparation stages. Therefore it is the great importance to option suitable tools for this activity. For all that it is possibly to use various spectrums of tools. For example both common or special equipment.

Uniform standpoint according to effectiveness of expert systems application it is difficulty stay. It is needed to analyse of tasks that must be solve relative to expert systems possibility. The priority can be for example the evaluation of initial investments /cost of software, cost of knowledge engineer, etc./.

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