

BLAISE

(Extract from CoRD 019, ‘A brief outline of existing data collection tools and new developments at Statistics Netherlands’, K-J Metz, 2000)

1. Short description

Blaise is an integrated system designed for efficient collection, editing, and analysis of survey data. In its present state it is a powerful and flexible system for computer assisted survey processing. Therefore the scope of Blaise is wider than just data collection. Based on a formal survey definition, the Blaise system automatically generates programs for computer assisted face-to-face interviewing with laptop computers (CAPI: Computer Assisted Personal Interviewing), for Computer Assisted Telephone Interviewing (CATI), for Computer Assisted Self-Interviewing (CASI) and for interactive entering and editing of data collected on paper forms (CADI: Computer Assisted Data Input)¹. Blaise also provides for various data manipulation facilities and has full survey management capabilities. With Blaise one can perform various activities in an easy and user-friendly way.

For the analysis of data files, Blaise can create descriptions of a Blaise data model for use by other software packages such as SAS, SPSS, Stata, Paradox and Oracle. In addition, users can define additional setups and system files of their own choice. Future releases of Blaise will be more and more “open”, using a.o. component-based technology.

Though Blaise was initially designed for interviews among persons and households it nowadays has developed into a tool with a much broader scope that can be used for all kinds of surveys, among enterprises as well.

Blaise is used worldwide by many types of survey organisations including government institutions, universities, and private research foundations. These organisations conduct a wide variety of surveys with it, such as labour force surveys, consumer price surveys, multilevel rostering household surveys, panel surveys, business and economic surveys, institutional surveys, health surveys, energy surveys, environment surveys, agricultural surveys, and programs of related surveys.

2. More detailed information

Since Blaise 4 Windows is the current version of *the* prominent data collection tool at Statistics Netherlands, some additional information giving a better insight in its possibilities is reproduced here from the Blaise web site.

Blaise 4 Windows is a powerful and flexible system for computer assisted survey processing. It provides a multitude of options and features for the survey developer:

Virtually unlimited capacity for extremely large numbers of questions, edits, and hierarchies.

Constant enforcement of all appropriate routes and edits without slowing down during long interviews.

¹ A new addition to Blaise’s functionality is CAWI: Computer Assisted Web Interviewing. This is provided by Blaise Internet Services, described hereafter.

Concurrent interviewing of two or more respondents.

Hierarchical, alphabetical, and trigram coding schemes which can be used together.

Lookups of information held in external files.

Metadata management and manipulation.

Data manipulation, re-coding, exporting, and importing.

Language switching during interviewing programmed to happen automatically, through menus, or with a keystroke.

Question-by-question interview aids within Blaise itself or through WinHelp.

Multimedia capability for graphics, video, and audio.

Mouse, pen, and touch-screen support.

Survey management and reports.

Sophisticated CATI call scheduling, including time zone adjustments, interviewer assignments, and time slices to target respondents.

Full control of fonts and font sizes for questions, response text, and entry cells.

Customisable user interfaces which can be modified for the user's organisation.

An audit trail that can be customised for the user's own needs.

As a development system, Blaise is suitable for both the individual and the large survey organisation. A *Control Centre* integrates many tools that help the developer produce and test instruments. Blaise can be used for surveys in multiple modes such as CATI and CAPI combined collections.

For interviewers, data entry personnel, and data editors, the interfaces are powerful and elegant and have proven to be very efficient and popular. For methodologists, Blaise allows data to be gathered correctly by using edits during the interview.

For high-level managers, Blaise can increase productivity. During instrument development, one system specification handles many tasks. During survey production, data collection, coding, entry, and editing are all combined into one or a few steps.

For systems managers, Blaise is a powerful, generalised system that can be customised to the organisation's needs, avoiding the need to develop expensive in-house systems.

Subject matter specialists, statisticians, and programmers can become adept at authoring Blaise instruments. The modular and reusable structure of the language allows many surveys to use the same blocks of code with little or no modification. This results in faster, surer development and better comparability between surveys. The multimode nature of Blaise encourages (and can *enforce!*) consistent specifications and conventions between multiple modes of use.

3. Blaise related products

3.1 Abacus

Abacus is a fast tabulation program. Simple and complex tables can be specified in a user-friendly way, and the generated tables are camera ready. Abacus is completely menu-driven, which makes it easy to use, even for people with little computer experience. Abacus is included in the basic set of Blaise.

3.2 Bascula

Bascula is a package that implements various techniques for computing adjustment weights. It can carry out post-stratification. If insufficient population information is available, Bascula can carry out either linear weighting or multiplicative weighting. It can be used both in combination with Blaise and as a stand alone package. Bascula is *not* included in the basic set of Blaise; a separate license has to be contracted.

3.3 Manipula

Manipula has been designed for manipulating ASCII and Blaise files. It is a versatile general-purpose data manipulation tool. It can split and merge files, sort and aggregate data, create and delete variables, convert files and create reports. Manipula is included in the basic set of Blaise. It can be used both in combination with Blaise and as a stand alone package.

3.4 Maniplus

Maniplus has been designed for the development of *survey control systems*. Some examples are: a CAPI laptop management system (single- or multi-survey), an in-office data flow system, a data editing organising system or a top-down data review with access to micro data. Maniplus can also be used to enhance CATI management. It is an addition to Blaise and can only be used in combination with it. Maniplus is *not* included in the basic set of Blaise; a separate license has to be contracted.

4. Platforms

At present Blaise exists for the MS/DOS platform (Blaise III) and the Windows platform (Blaise 4 Windows). Current Blaise III users can continue their license until 2001, but no new Blaise III licenses are issued anymore. Blaise 4 Windows is a *full 32-bit* Windows program, suitable for Windows 95, 98, and NT 4.0 ². Up to version 4.2 the metadata and data file structures are compatible with its predecessor, Blaise III. This allows users of previous versions of Blaise to easily change to Blaise 4 Windows. From the current version 4.3 onward there is no such compatibility, because of the introduction of new internal storage structures.

5. Availability to other NSIs

At the moment there are 76 registered institutional users of Blaise (excluding the old MS/DOS version 2); among these 76 are many NSIs. Other NSIs wanting to use Blaise must obtain a license. The same holds for the auxiliary products Maniplus and Bascula. There are different types of licenses, depending on the intended use and the required support. Details on these types of licenses can be found at the Blaise web site: <http://neon.vb.cbs.nl>

Additional information can also be acquired from the Blaise support group at Statistics Netherlands via e-mail: blaise@cbs.nl

² Currently the functioning of Blaise 4 Windows under Windows2000 is under test.