

Blaise 5



Gaining **deeper** understanding

One data collection system for all your needs.

Change is the only constant

The survey world is changing faster and faster. Until the mid-1990s, only paper and computer questionnaires existed. Then web surveys emerged. Researchers had only started getting familiar with browser layout when mobile devices gained significance. New questions arose: How do we deal with much smaller screen sizes and different input methods, and how do they affect data quality? Methodological research for mobile devices is well underway, but already new challenges await with sensor measurement, GPS tracking, voice recognition, and computerized language translation.

These emerging developments will yield new data collection possibilities. However, two questions persist: How do we make use of this potential, and what are the methodological challenges involved?



In your quest for data, Blaise 5 combines methodology with technology

Meet Blaise®

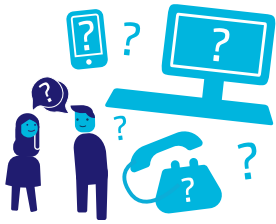
Blaise® sits at the heart of Statistic Netherlands's (CBS) data collection program. As a National Statistics Institute (NSI) CBS has long known that methodology and technology have to work together to collect quality data in a modern world. Not only has Blaise evolved side-by-side with researchers from CBS and other NSIs, but it has also adapted to the differing requirements of NSIs and renowned research firms worldwide for almost 35 years.

The cooperation between Blaise and its partners helps the system adapt to the changing demands of the survey world. Together, we react to technological and methodological challenges by building prototypes, developing appropriate methods and solutions, and refining existing approaches. Because of the extensive list of requirements from its user base, the Blaise survey software platform offers an impressive and ever-growing list of features. Blaise embodies the expertise of major NSIs and renowned institutes and thus connects its users to a pool of knowledge.

Our goal is to help you gain a deeper understanding.



Blaise 5



True Multimode

Blaise enables you to deploy your questionnaires in single or mixed modes depending on your research design. You can decide the modes for each survey and determine how you stage each mode in a mixed-mode design.



Multiplatform

You can fill in Blaise 5 questionnaires on all common platforms. No matter which browser or operating system your respondents and interviewers use, your questionnaires will always appear the way you specified them..



Multidevice allows for hybrid-mode

Blaise 5's powerful Layout Designer helps you create questionnaires that adapt to any device and screen size. This enables you to make use of hybrid-mode¹⁾ when you deploy your questionnaires for multiple devices and saves you the time of creating many custom designs.



Built for diversity

Create multilingual and multinational questionnaires with Blaise 5. The system supports all western, right-to-left, and Asian interviewing languages and can switch between them during an interview. Blaise meets accessibility standards for people with disabilities.

1) Hybrid-mode allows for switching between devices and platforms at any point during an interview. Respondents may change to a different device and continue the questionnaire exactly where they left off.

Flexible and adaptable



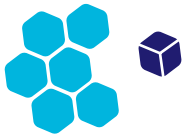
Integrated Development Tools

Blaise 5 offers integrated development tools that you can configure to support your organization's needs: Control Centre, Layout Designer, Resource Editor and on-line help.



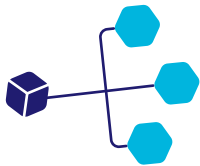
Invest in one survey platform

Blaise 5 supports all aspects of survey production, including data collection, data coding, data entry, and data editing. Investing in one system that handles all survey production tasks helps cut down your organization's costs, work time and resources.



Questionnaires are modular and reusable

Blaise 5's domain-specific language lets you design your questionnaires in blocks of code. This modular structure makes reusing parts of an instrument easy.



Design questionnaires once and use them everywhere

Blaise 5's layout and operational flexibility enable you to design a questionnaire once for different interview modes and devices. No matter where your users respond to your questions, the details of your design adapt to their screen size and input method, making your questionnaires truly multi- and hybrid-mode.



Full control with Data Entry Programs

Blaise 5 instruments can be filled in anywhere. Blaise Data Entry Programs (DEP) give interviewers the freedom to collect data while being connected to or disconnected from the internet. Choosing your run mode preference lets you safeguard data, even when there are connectivity or power issues.



Questionnaires support all types of research designs

Blaise 5 can handle the most straightforward one-off survey all the way to multi-instrument, longitudinal studies. You decide the mode for each survey and determine how you stage each mode in a mixed-mode design. For institutional surveys, different respondents can each handle part of a questionnaire. For a household survey, a screener can enumerate family members, and spawn any number of cases suitable for each member. Additionally, your respondents can make use of your hybrid-mode design by switching between devices at any point in the questionnaire.

On the pulse of survey institutions

Because of its wide-ranging and high-volume research needs, CBS has made Blaise development a priority for over 30 years. There is a close association with methodologists, questionnaire designers, and other research experts within CBS. Through these efforts and collaboration with users around the world, Blaise 5 is continuously enhanced and renewed.

Blaise deepens its knowledge of the survey world by associating with relevant experts in the field. As a member of the Data Documentation Initiative (DDI Alliance) and a collaborator of Colectica, Blaise provides a rich integration of metadata. Its long-standing partnerships with Westat, the University of Michigan and the University of Utrecht focus on issues of multi-platform deployment, open architecture, accessibility, statistical data integrity, and layout design. Because of these collaborations and the possibility to regularly exchange knowledge and experiences, Blaise 5 users profit enormously.



International Blaise User Group and User Conferences

The International Blaise User Group (IBUG)²⁾ was founded at the first International Blaise User Conference (IBUC) in 1992. Since then, every 18 months, the IBUC brings together survey professionals from around the world. The conference offers a forum for the exchange of ideas and experiences on Blaise, survey data collection, and data processing. Over the course of four days, guests visit workshops and presentations from other Blaise users and Team Blaise. Discussions, social events, and excursions offer an ideal platform for exchanging knowledge and networking. Between IBUC conferences, there are frequent bilateral liaisons between IBUG members.



Blaise Corporate License User Board

The Blaise Corporate License User Board (BCLUB) is composed of survey managers, data analysts, methodologists and questionnaire designers from organizations using Blaise under a corporate license. The NSIs, research organizations, and universities frequently exchange their knowledge and experience with Team Blaise. Together the BCLUB members test, discuss, and give feedback on new functionalities and specify new product requirements.



BaseCamp Forum

The BaseCamp Forum is an online discussion board for Blaise users. Here users ask questions, share information, and stay informed on community events and the latest software updates.

²⁾ BlaiseUsers.org



Join the vibrant Blaise community and exchange ideas with leading research experts from around the world.



Blaise 5 supports your organization



Blaise has an outstanding track record. NSIs worldwide use it for personal, household and economic surveys covering a wide range of topics. International studies like PRISM³⁾ and CIDI⁴⁾ are developed and conducted with Blaise. Census surveys like the Census of Population in Cyprus have also been administered with Blaise, making it a leading software solution for government and scientific surveys worldwide.

Dedication to research institutions

Blaise stands for high-quality support and commitment to its users. Team Blaise helps design hundreds of exceedingly complex questionnaires and supports users when integrating Blaise within their organization's IT infrastructure. Blaise 5's highly advanced programming language, its server and survey management tools, and its open architecture offer full control over the survey process. For rapid, iterative survey development and testing, Team Blaise and Colectica collaborated to create Blaise Colectica Questionnaires (BCQ). This survey specification creator allows users without programming experience to design questionnaires visually.

Call Scheduler for CATI

Specified calling schemes optimize your telephone interviews. Blaise 5 delivers a powerful Call scheduler for CATI with which you can create specified calling plans based on interviewer groups, time zones, time slices, different types of appointments, and respondent reactions. Customize any detail of case delivery with an easy-to-use CATI specification program.

Mixing modes made easy

A Blaise 5 multimode questionnaire works on one data model streamlining the integration of interview modes. This lets you conduct each survey based on its requirements, population, modes you plan to use, and your sample. You can stage modes sequentially or simultaneously.

3) Psychiatric Research Interview for Substance and Mental Disorders

4) Composite International Diagnostic Interview

Blaise Data Entry Programs

When conducting a survey, you want your respondents and interviewers to focus on the questions. Blaise 5 provides intuitive, flexible, and fast interfaces that guarantee your specified appearance, be it in a browser, on a desktop or a mobile device. You decide how your interviewers or respondents see and interact with your questionnaires. Blaise 5 includes a case management application (CMA) that allows your interviewers to view and update their workload across different surveys and collect data while connected to or disconnected from the internet..

Testimonial

Statistics Norway has been working with Blaise since 1991. We started with data editing, and in 2006 we used Blaise to produce our first internet questionnaire. Today, all our web surveys are done with Blaise 5. We create complex questionnaires and our investment in Blaise has helped us enormously.

Hilde Degerdal, Statistics Norway

Blaise 5 Features at a Glance

- 🔸 Suitable layout for all devices.
- 🔸 Works on all leading platforms .
- 🔸 True multimode and hybrid-mode surveys.
- 🔸 For multi-lingual and multi-national questionnaires.
- 🔸 Easy import of survey specifications made in BCQ for more complex surveys .
- 🔸 Fast, intuitive data entry apps for Windows, Android and iOS feature excellent navigation and error correction.
- 🔸 Fully compliant with the latest accessibility and usability standards for people with disabilities .
- 🔸 Survey processing on-site or in a cloud .



Methodologist Challenges



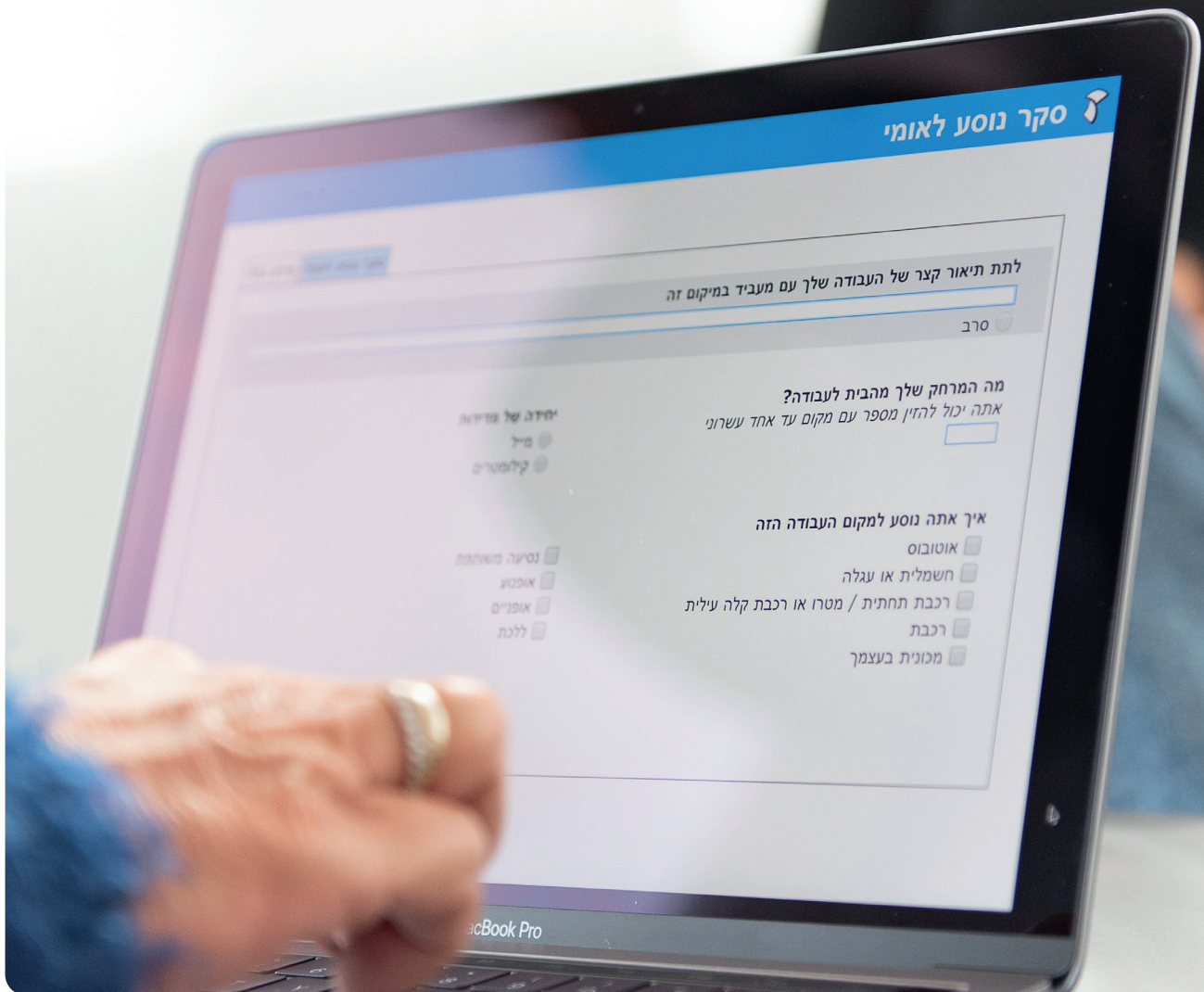
As a methodologist, you care deeply about how interviewers perform. You are even more concerned about how self-reporting respondents use the web questionnaire on a computer or a device. You may wonder how pace differs between interviewers. There may be an issue with break off for self-respondents, and you wonder if this occurs at a particular place in the interview.

Tools to Assess Instrument and User Performance

Blaise 5 offers methodologists ready-to-use tools that (almost) allow you to look over the user's shoulder while they fill in the questionnaire. Two of these tools are audit trails and Computer Audio Recorded Interviewing (CARI). The audit trail, for example, gives you timing data for each field. You can see any specific navigation movements such as backing up, or if an edit has been invoked and the respondent changed an answer or a path. CARI allows you to hear or view the conversation between an interviewer and the respondent, even in remote interviewing sites for CAPI. You may determine that there are parts of the questionnaire that need revision.

Conquering Layout across Devices

Then there is the question of how to design a questionnaire that works for both interviewers and self-respondents across a wide variety of devices. You would like to specify once and have the system generate equivalent interfaces across devices. The Blaise 5 Resource Editor is for you! It allows you to define templates for different screen sizes and orientations, then apply these automatically through the Layout Designer. You have considerable flexibility to adapt templates as you conduct your interface research.



Methodology Features at a glance

- 👉 Computer Audio Recorded Interviewing (CARI).
- 👉 Audit trails for computers, browsers, and remote devices.
- 👉 Audio Computer-Assisted Self Interviewing (ACASI) for the confidential part of an interview.
- 👉 Resource Editor and Layout Designer to conquer layout challenges.
- 👉 Latin, right-to-left, and Asian interviewing languages .
- 👉 Unique checking mechanism ensures data integrity, fast speed and unmatched navigational capability .
- 👉 CATI history and other survey management log files enable Responsive and Adaptive Survey Design for efficient data collection.
- 👉 On-the-fly coding using hierarchical or trigram coding frames, e.g., for foods, medicines or cars.
- 👉 Randomize questions, answer categories, table columns.





Dive deep into data

As a data analyst, you want to handle survey data quickly and freely. Blaise 5 can render its descriptive metadata as data step statements in SAS®, SPSS®, or Stata®.

Leveraging Blaise structure and metadata

Some of the world's largest and most complex government and scientific surveys like CIDI use Blaise 5. Such studies contain thousands of variables that are easily managed using Blaise's structured language, hierarchical data structures, and superior metadata capabilities. To give one example, you can set the mode of collection for each variable and establish whether an unanswered question was off-route, skipped, received a 'Don't know', 'Refusal' or any other self-defined attribute.

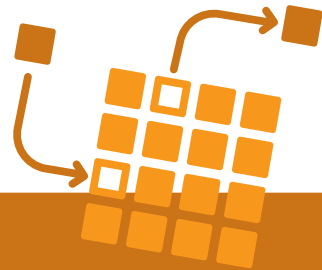
Data handling with Manipula

Blaise can work with both file-based and server-based relational databases. Manipula is a powerful scripting data processing language that complements the interactive Data Entry Program. With Manipula, you can import, export, recode, extract or otherwise restructure your data and generate reports. Moreover, Manipula lets you edit the original questionnaire data file while in production. A Manipula extension- Manipula Dialogs-brings an interactive capability to Manipula. You can use Manipula Dialogs to build survey management interfaces that are entirely integrated with the Blaise system.

For our organization, one of the most valuable aspects of using Blaise involves access to the survey data and the associated paradata. Blaise provides robust solutions to export data into many formats using Manipula. The value of the associated paradata is critical to control the quality of our interviewer-administered surveys and for understanding the behavior of our web respondents as they navigate through our surveys. The Blaise paradata is rich, with the ability to capture all keystrokes and actions within the survey. We have found no other data collection tool that provides this level of paradata capture, a crucial aspect for our researchers' analysis.

Gina-Qian Cheung,
Chief Technology Officer at the Survey Research Center (SRC),
University of Michigan

Data Features at a glance



- Thousands of variables per case are possible.
- Works with file-based and server-based relational databases.
- Manipula provides connections to SAS®, SPSS®, Stata® and other data analysis tools.
- Define individual special answers, including off-route and other notations.
- Powerful data manipulation.
- All survey data types including string, numeric, code-one (enumerated), code-all (set), long-answer (open), date, and time.
- All survey data structures including arrays, blocks and tables.
- Specially coded answers from various coding frames such as a particular country, cities, car make and model, kinds of food or medicine.



Blaise 5's Integrated Developer Environment

Handling multimode and multi-device questionnaires can seem daunting. However, with Blaise, all the development and testing of your questionnaire happens in one place—the Control Centre. Blaise 5's IDE neatly combines all the tools you need during the development of a questionnaire.

Control Centre for all aspects of questionnaire development

Intelligent code completion, visual aids, error indicators and instant error messages help you concentrate on your questions, flows and edits. Continuous source code parsing immediately identifies syntactical mistakes. Blaise's modular structure uses blocks of code to ensure straightforward questionnaire development. This lets you easily reuse parts of a questionnaire, which simplifies comparing and updating continuous surveys and makes collaborative work on an instrument possible.

Survey organizations will find it profitable to standardize question types that are used in two or more surveys. Types can be shared by many applications. This speeds up programming and makes it easier to compare results. Interviewers and data editors will also appreciate the common standards between surveys.

Full control over your layout

Blaise's IDE is even more powerful because it combines the programming interface for your source code with interfaces for metadata, settings and layout—all neatly sorted in tabs. With the Layout Designer, you can define every visual aspect of your questionnaire and immediately see your changes. If you want multiple layouts for different modes, the Layout Designer offers you easy maintenance and transferable designs for all interview methods. With the Resource Editor, you can create templates according to your organization's design standards. Properties of the templates such as colors, dimensions and fonts can be adjusted for specific questionnaires in the Layout Designer. These layout tools combined give you full control over your questionnaire's appearance across screen sizes and its device operability across devices.

Multimode made easy

Blaise 5 has unique capabilities that help you implement multimode surveys. Keywords used in the source code connect to layout and operational settings. For example, 'MODES' defined in the source code correspond to the equivalent Layout Set Groups. This allows a connection between mode and layout. Similarly, you can attach different operational settings for each platform and mode. This gives you complete control over how you want your multimode questionnaire to behave.



Developer Features at a glance

- ✔ Rich Integrated Developer Environment (IDE).
- ✔ Great text editor that includes Intellisense®, snippets, syntax highlighting, keyword and field name suggestions.
- ✔ Source code parser is real-time or in batch according to your development style.
- ✔ The ability to include source code from many files makes multi-programmer development and the migration of code from one survey to another easy.
- ✔ The Control Centre has views on the source code, metadata, settings, and layout all in one place.
- ✔ Three different metadata views give you complementary perspectives on your datamodel structure.
- ✔ Solution and project files help you manage the source code.
- ✔ Supports integration with source code control systems.
- ✔ Full training and support from Statistics Netherlands and Westat (the Americas).





Blaise 5 for IT and Security

As the IT-staff in your organization, you are always confronted with software and servers not running smoothly. Integrating new systems with the already implemented ones often results in headaches. Especially because software packages built for integration are few and far apart.

Blaise 5 likes to integrate

Blaise 5 is different. Blaise 5 wants to get along with other systems and comes with various API Kits. Instead of changing your existing web hosting, timekeeping, data analysis and the many systems your organization requires, Blaise 5 adapts to fit in. With the help of Blaise APIs, you can seamlessly incorporate your existing IT infrastructure into Blaise 5 and vice versa. Our support team dedicates itself to helping with any issues that arise during the creation and implementation of Blaise APIs.

Blaise likes security and data encryption

Data collection goes hand in hand with data security. Every NSI must fulfill the security and privacy standards of its country. Blaise's producer, CBS, needs to comply with EU data security and privacy laws, while other Blaise users have to follow similar regulations. For this reason, the survey platform works within any secure environment and fulfills worldwide security standards. In order to secure your instruments and your data, Blaise 5 deals with permissions, authentication and encryption of data in transit and data in rest. Blaise 5 uses SSL for the connection between your servers and data transmission from the outside. Additionally, data are encrypted for the transfer from apps and other services, making sure your entire environment is safe.

With Blaise 5, you can also separate survey data from Personally Identifiable Information (PII), even during data collection. This way, your analysts only see the data intended for statistical production. Blaise is examined by third-party security testers to ensure safety from breaches, therefore integrating this software platform with your systems will not compromise your IT infrastructure's security.

Blaise likes scaling

Performance is crucial when you deploy web surveys. Blaise 5 includes a tool to administer server parks. Blaise Server Manager's intuitive interface helps you set up your local machines, maintain your servers, and manage users. With the role and user management, you can assign and modify users, user groups and their functions. The server setup lets you define server roles, set passwords, configure connections, and name storage locations of each survey. Through the maintenance component, you control the activation and deployment using server groups. This helps you manage your servers by tasks to scale performance and maximize concurrency – all with one tool.

Testimonial

Blaise's support team helps us immensely. At the Northern Ireland Statistics and Research Agency (NISRA) we recently started migrating to Blaise 5. Whilst we were arranging our new server setup, we ran into some issues with getting our configuration right. The Blaise team supported us via emails and conference calls and even went so far as to add features to Blaise to help solve our problems.

Andrew McCormick, Head of survey modernization, NISRA

IT Features at a glance

- APIs enable Blaise 5 to integrate with your IT infrastructure.
- Blaise 5 works well in secure environments and has Passed several security audits.
- The native Blaise database is SQLite.
- Blaise also writes to Oracle, MySQL, PostgreSQL, and MS SQL Server relational databases.
- Data encryption during data collection.
- A Blaise 5 instrument can preload any number of variables.
- Blaise Server Manager helps you administer your server parks.
- Blaise works well on your LAN/WAN
- Blaise scales



Training and Support

As a Blaise user, you are supported in many ways.

- Formal training sessions at Westat for the Americas, at CBS for the rest of the world, or at your site.
- Training sessions preceding every International Blaise Users Conference.
- Consultations at your workplace, at CBS or Westat.
- Email support including inspection of your instrument's source code and configuration files.
- Transition As A Service (TAAS) from Blaise 4 to Blaise 5.
- Survey as a service (SAAS) or Layout as a Service (LAAS) for organizations that need help with their first survey.
- In-depth help resources within the Blaise Control Centre.
- Samples supplied with the Blaise system.
- Instructional videos for a growing list of topics.
- Detailed documentation of Blaise 5 tools and capabilities.
- Proceedings from all the IBUCs⁵⁾ cover a wealth of information and topics.
- Question and answer to the Blaise BaseCamp forum, where any Blaise user can pose a question and receive responses from Team Blaise or other users.

5) www.blaiseusers.org/page.php



About CBS' Blaise

Statistics Netherlands (CBS) is a highly regarded National Statistics Institute (NSI) and the producer of Blaise. CBS has long been a methodological leader in data collection, sampling and data analysis. In 1986 it became the first user of Blaise, a product it had developed to make data editing more efficient through computer-assisted methods.

Blaise®

Blaise® is a software platform for survey data collection and survey processing and is designed to handle government and scientific surveys. Stationed at the CBS offices in Heerlen, Netherlands, a team of dedicated software engineers and survey specialists make up the heart of Team Blaise. The Team works in the same building as CBS' data production teams and knows first-hand how their system is used. Together with CBS' methodologists, data analysts, questionnaire developers and survey managers, they continuously work on innovating Blaise while supporting their user community.

Blaise Community

The Blaise community is a group of major NSIs and prestigious statistics organizations. These research institutes have collected data for decades. Often their research data collected with Blaise play an essential role in national and international policymaking. Each organization has its way of working and adapting to changes in the survey world. Every new user in this community presents new approaches for collecting data. Every time the list of requirements grows, the Blaise system expands, and all users benefit.

Blaise is further embedded in the world of data collection through its association with Colectica, the Data Documentation Initiative (DDI Alliance), Westat, and leading universities such as the University of Michigan, and Utrecht University. These are major survey players in their own right. Westat, Blaise's distributor and supporter in North America and South America, is a preeminent survey research company in the United States and has been an innovator for many decades. Both universities are known for their pioneering methodological research and are often on the cutting edge of technology.

Together, the Blaise community creates a diverse and demanding user base that has worked together for almost 35 years, constantly seeking ways to discover the "why" behind the "what" –gaining deeper understanding.

For more information on Blaise®

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Gaining deeper understanding

