



Biometix

Biometix is the most experienced commercial biometric consulting and evaluation organisation in the Asia Pacific region.

We are not aligned to any vendors of biometric systems.

We specialise in providing independent consulting advice in the following areas:

- Fundamental advice regarding the use of all types of biometric technologies
- Quantitative evaluation of:
 - Existing databases of biometric information
 - Various vendors and biometric technologies with regard to clients' own data and environment
 - Pilot systems
 - Scale-up issues
 - Impact of multi-modal biometric systems
 - Demographic variances
 - Achieved False Alarm and False Reject Ratios
 - Environmental issues affecting results
- Troubleshooting of problem systems
- Identification of problem enrolments
- Architectural design of biometric systems
- Assistance in the project management of new systems
- Establishing sound processes for auditing systems
- Evaluation and investigation of fraud and
- Advice on ongoing management and upgrading of biometric systems.

For over ten years we have been involved with large government biometric projects globally, and assisted with the testing and assurance of most of the leading biometric products and vendors.

Our clients have included:

- Large government departments in Australia, UK and Asia
- Motor vehicle authorities in Asia/Pacific and Europe
- Police and security organisations in Asia/Pacific, Europe and USA;
- Large international systems integrators; and
- Corporations worldwide.

Biometix has an international reputation in furthering techniques for biometric evaluation. In 2007 we were awarded the best paper by the Institute of Electrical and Electronic Engineers (IEEE) for innovation in this area.

Dr Ted Dunstone, the CEO and founder of Biometix, was also the founder and chairman of the Biometrics Institute in Australia and New Zealand. He has personally provided consultancy and biometric evaluation services over the last fifteen years to a wide range of government agencies and organizations. He is also a frequent speaker on the application of biometrics and is well known within the international biometrics community. He is now the chair of the technical committee of the Biometrics Institute, as well as sitting on numerous international biometric committees. He is the co-author of a new textbook on biometric data analysis, published by international textbook publisher, Springer.

As a result of our consulting and evaluation experience, Biometix has developed an evaluation tool (Performix) to assist with biometric product selection, risk analysis and system optimisation. This tool assists in all phases of a project lifecycle from the initial selection, through to on-going management and reporting. (see later)

Performix™

Biometix' scientists have developed **Performix**, a full-function software system, that provides a way of analysing even the largest and most complex single-mode and multi-modal biometric systems.

It is now being operated as a sister company to Biometix and is being sold to organisations around the world.

Biometix uses **Performix** as an integral part of all of its consulting assignments.

Performix is a vendor-independent, intuitive, easy-to-use toolkit that lets you tune, manage, analyse, visualise, interrogate and report on information in any biometrics database, regardless of its size or level of complexity.

Most people use **Performix** to save time, effort and money – typically many hundreds of thousands of dollars per annum.

People charged with managing and using biometric systems do not want to be concerned with the intricacies of the underlying statistics or the complexities of data analysis. However, they need to assure themselves and all other stakeholders that the system is working properly for the wide variety of customers that will be using it.

So it is necessary to have comprehensive, easy-to-use, management and reporting capabilities that can identify issues and problems before they start to impact those people that matter most to your organisation.

For example, simply adjusting parameters in order to reduce the incidence of malicious or accidental entry by impostors (i.e. reducing false accepts), is likely to create problems for valuable customers by having them denied legitimate access (i.e. increasing false rejects).

You also need to ensure that you minimise the risks of serious mishaps – especially a serious breach of security or denial of service to a very important group of customers or clients.

You need to have access to an easy-to-use management system that can help you to adjust complex parameters and let you know on an ongoing basis when you have achieved the optimal balance to suit your particular needs. And it needs to understand all about the “balance of probability”.

Performix can be used in four main ways through the lifetime of a biometric system:

- **Evaluation**
 - Manage, run and compare various biometric systems against your particular group of enrollees to determine which vendor or type¹ of biometric is best suited to your application.
 - The wrong choice could cost a substantial amount of money and prestige.
 - Analyse the quality of current enrolments and how particular vendors will handle this data.
 - One vendor may perform better on the existing data than another vendor and could save you millions of dollars through not having to re-enrol all of the users.
- **Assessment**
 - Once you have installed a system, the selection and modification of parameters can be a time-consuming activity and the complex interaction of multiple parameters can't be reliably performed by a process of "trial and error".
 - When it comes time to install updates and additional parameters, you need to know the real impact of such changes beforehand. A costly upgrade that yields few tangible benefits, or even produces detrimental results, can be a very costly mistake.
- **Management**
 - Biometric systems need to be managed throughout their life.
 - Complex demographics and changes to these demographics need to be understood.
 - False alarm rates need to be tracked.
 - Fraud needs to be monitored.
 - Wide-ranging sets of reports need to be prepared for upper management, to determine service level performance and for other operational activities, including risk assessment and management.
- **Investigation**
 - You need to be able to determine the potential for fraud.
 - Persons or events of interest should be tracked.
 - Accidental or malicious impostors need to be identified and the reasons for their false identities determined.

These are just a few of the activities that make **Performix** an extremely valuable tool for any biometric system.

For more information, contact Biometix. Details are on the first page of this document.

Or, browse our web site at www.biometix.com

Performix™ is the trade mark of Biometix Pty Ltd.

¹ Face, fingerprint, iris, palm, voice, etc., or multiple combinations of them.