

Position Description

POSITION TITLE:	Principal Software Engineer
REPORTS TO:	Enterprise Applications Manager
EMPLOYMENT TYPE/STATUS:	Full time
EMPLOYMENT STATUS:	Fixed Term (12 months)
CLASSIFICATION:	Level 8
DATE REVIEWED:	September 2026

Team Overview

The Information Technology services team, located in Carlton, is responsible for leading the provision of technology to enable and improve the delivery of the BreastScreen Victoria Program. Services include:

- IT Service Desk for user support including resolving technology related incidents and providing support
- Enterprise Applications Program to deliver technology to enable screening, reading and assessment, as well as program monitoring and reporting
- Data management, access and release (client data)
- Cyber Security Improvement Program to deliver on the cyber security strategy and priorities
- IT infrastructure support and maintenance (hardware and network) and
- Projects to deliver new technology and major upgrades

The BreastScreen Victoria IT services team is responsible for the availability, performance and security of the IT environment including desktops, contact centre, data centres, server rooms and network to connect over 50 screening sites (co-located in public and private radiology services), mobile screening vans, satellite reporting sites and Carlton office. The delivery of the service is guided by Department of Health Digital Health ICT operations maturity framework and ITIL and service performance is reported to the CEO and Executive Leadership Team, and Board via IT Standing Committee.

Its work supports the evolving needs and long-term growth of the BreastScreen Victoria program by improving system functionality, user experience, and service efficiency. The Enterprise Client Applications team is committed to applying best practice methodologies, standards and governance across all areas of application support and development.

Role Objective

Gecko is BreastScreen Victoria's Client Information System supporting screening and assessment client pathways. Gecko operates as part of a broader ecosystem of automations and integrations with key systems. The Principal Software Engineer is a hands-on technical leadership role responsible for designing, developing, and delivering software solutions that support Gecko's architectural simplification and centralisation.

The role is expected to lead and contribute directly to key architectural improvements, including centralising the Gecko service layer, improving application and database performance, and re-architecting the Gecko data access layer. The role will also establish technical standards, patterns, and engineering practices, while guiding the development team through the progressive modernisation of Gecko.

The Enterprise Client Applications team works in two-week agile sprints, with a strong focus on quality, security, reliability, and maintainability.

Key Responsibilities – Include but not limited to:

	Key Responsibility	Key outcomes
1	Solution Architecture and Technical Design a) Lead the design of solution architecture for Gecko ecosystem aligned with BSV's enterprise architecture, security requirements, business needs, and technology strategy. b) Define architecture across key areas, including technology stack, core application services, integrations, cloud and hosting, deployment, data access, database design, security, logging, monitoring, and authentication. c) Translate architectural designs into practical implementation and migration approaches, considering existing systems, delivery priorities, operational support, and technical constraints. d) Contribute directly to implementation through hands-on development, technical prototyping, code reviews, and resolution of complex engineering issues. e) Establish technical standards, patterns, and engineering practices, and communicate architectural decisions, risks, and trade-offs to relevant stakeholders.	a) Architecture is documented, maintained, secure, and aligned with BSV's enterprise architecture and business requirements. b) Designs are practical, scalable, supportable, and successfully translated into implemented solutions and migration plans. c) Technical standards and architectural decisions are clearly understood and consistently applied across the development team.
2	Software Engineering a) Design, develop, test, and implement software changes across Gecko and related systems.	a) Software is delivered within agreed timeframes.

	b) Ensure solutions meet approved architecture, business requirements, technical standards, and delivery priorities. c) Support migration and implementation activities while maintaining continuity of critical services.	b) Software meets agreed quality standards and has a low level of defects. c) Software change is introduced with minimal disruption to critical business operations
3	Software Quality and Security a) Embed security, quality, performance, and reliability requirements throughout solution design and software development. b) Establish and promote coding standards, automated testing, peer review, secure development, logging, monitoring, and error-handling practices. c) Identify and address software vulnerabilities, defects, performance bottlenecks, and reliability risks. d) Work with QA Lead and Enterprise Applications Team to improve solution quality and operational supportability.	a) Solutions are secure, maintainable, testable, reliable, and performant. b) Technical risks, vulnerabilities, defects, and performance issues are identified and addressed promptly. c) Engineering standards and quality practices are documented and consistently applied. d) Production incidents and escaped defects are reduced over time.
4	Risk Management Manage risks, including development and monitoring risk mitigation strategies related to development.	Risks are minimised and mitigations are identified.
5	Other duties as directed by your manager that contribute to an individual work plan	

Level of Supervision and independence

Reporting to the Enterprise Applications Manager, the Principal Software Engineer is accountable for the technical design, development, and modernisation of BreastScreen Victoria's enterprise applications.

As a Level 8 employee under the BSV Enterprise Agreement, it is expected to provide technical leadership and guidance to others within the Enterprise Client Applications team. The role requires the ability to analyse and resolve complex technical and architectural issues using a high degree of independent judgement, original thinking, and professional expertise.

The position will manage technical priorities, provide leadership across significant initiatives, and work collaboratively with internal and external stakeholders to achieve agreed outcomes. This includes influencing technical decisions, negotiating practical solutions, identifying and managing risks, and supporting the delivery of work within agreed timeframes.

Key Behaviours and Values

At BreastScreen Victoria, our values are more than words on a page; they reflect who we are and how we work. Our values inform our everyday decisions. They guide how we interact, solve problems, support clients, and contribute to a strong, unified team.

From the way we support each other to how we welcome and care for our clients, our values of Caring, Respect, Collaboration, Inclusion, and Excellence form the foundation of our workplace culture.

BreastScreen Victoria provides positive guidelines around key behaviours and values to ensure the work of all employees is effective, respectful and contributes to the positive culture of our organisation. Adherence to the BSV Performance Behaviours Dictionary, Code of Conduct and other relevant organisational policies and procedures is an ongoing requirement of the role.

Key Selection Criteria

Academic Qualifications	
ESSENTIAL	DESIRABLE
Tertiary qualifications in Information Technology or equivalent field.	Previous experience in a healthcare setting

Technical Abilities & Skills	
ESSENTIAL	DESIRABLE
Minimum 5 years of experience in software development including designing and developing enterprise software solutions using .NET and C#.	Experience working with HL7, DICOM, PACS, or healthcare integration technologies.
Strong hands-on experience designing, developing and integrating SOAP and REST APIs.	Experience with Azure cloud services and hybrid application architectures.
Advanced software architecture and solution design skills, including service-layer and data-access-layer design.	Experience modernising large-scale legacy applications.
Strong understanding of secure software development practices, including identity and access management, vulnerability management, secure coding, and security-by-design principles.	
Strong experience with Oracle databases, PL/SQL query optimisation, and database performance tuning.	
Demonstrated ability to diagnose and resolve complex application, integration, and performance issues.	

Personal Abilities & Behaviours	
ESSENTIAL	DESIRABLE
Excellent communication and relationship building skills to enable insights into current systems and alignment across teams with effective technical decision making.	Digital native, lives and breathes technology.
Collaborative team player.	
Creative and innovative mindset, with the ability to think outside the box and develop new and unique solutions to complex problems.	
Ability to explain technical concepts and communicate impacts clearly whilst promoting adoption of new ways of working.	
Growth mindset. Always seeking personal growth and improvement.	

Relationships

INTERNAL	EXTERNAL
IT Team	Technology Suppliers
BCU staff	Consultants relating to projects

Diversity & Inclusion

We are committed to promoting diversity, inclusivity and accessibility within our workplace, and encourage people from diverse communities and backgrounds to apply for roles at BreastScreen Victoria. This includes (but is not limited to): people from multicultural backgrounds; LGBTIQ+ communities; Aboriginal and Torres Strait Islander peoples; and people with disability.

BreastScreen Victoria have a number of policies, procedures and systems that promote inclusive behaviours throughout our workforce. They are all key indicators for successful performance in this role.

About BreastScreen Victoria

BreastScreen Victoria operates a population-based breast cancer screening program that aims to reduce the impact of breast cancer and save lives through early detection. We provide free breast screens (mammograms) to women and the trans and gender diverse community aged 40 and over without breast symptoms, targeting those aged 50 to 74 years who are proven to benefit the most from population-based screening.

We are contracted by the Victorian Department of Health to deliver breast screening in Victoria as part of the national BreastScreen Australia Program.

BreastScreen Victoria operates across a network of permanent and mobile screening clinics and assessment services to provide high-quality and inclusive care for the Victorian community.

Our program is client-focused, embedding client input and feedback at every stage.

Our services are quality assured and accredited under the BreastScreen Australia National Accreditation program, and our performance is measured against the National Accreditation Standards.

Our program



The BreastScreen Victoria program is for women, including eligible trans and gender diverse people.



The program is for women with no breast symptoms.

50-74

BreastScreen Victoria invites women aged 50-74 to get a breast screen (mammogram), based on evidence that screening is most effective in this age group. The program is also open to women over 40.



A breast screen is recommended every two years.



Clients may be called back for further tests. This does not mean breast cancer is present; however, more tests may be necessary.

How we deliver our program



The BreastScreen Victoria program is free.



A breast screen takes just 10 minutes.



No Medicare or doctor's referral is needed.



All breast screens are conducted by experienced woman radiographers.



Breast screening and assessment services are available across Victoria. Two mobile screening services provide screens in rural and regional communities.

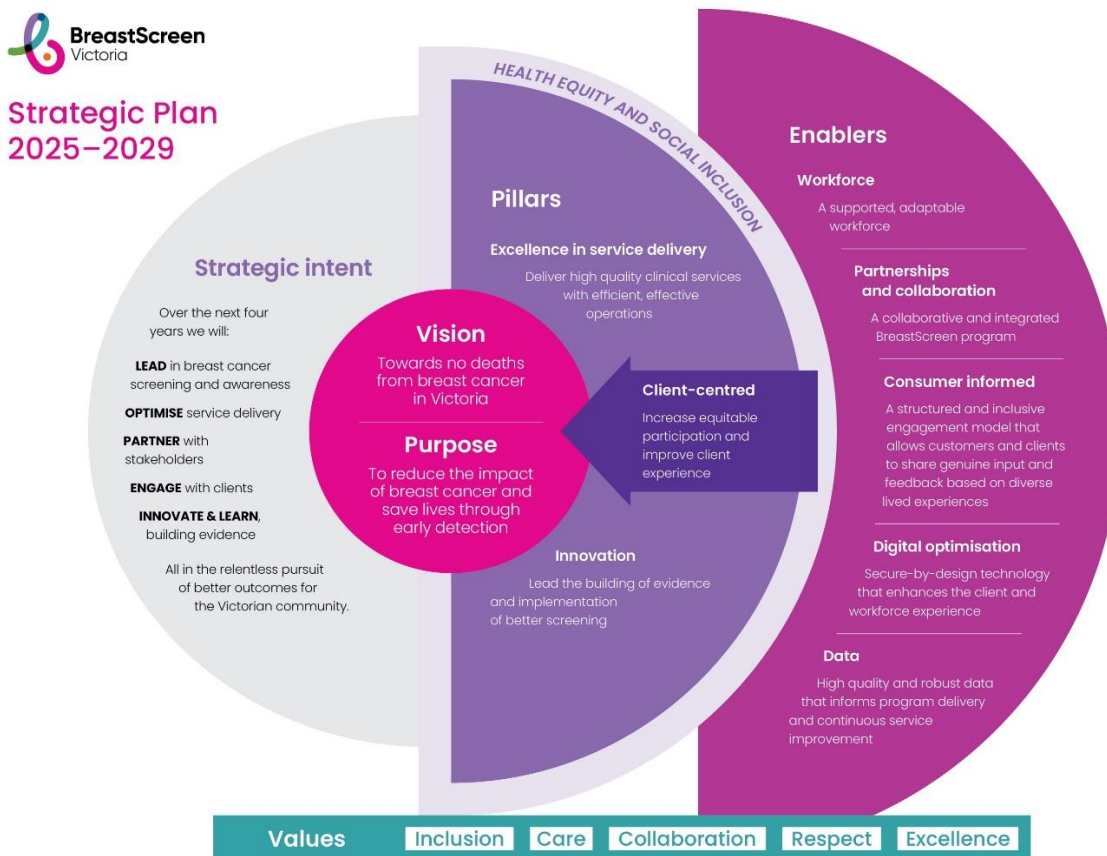
Strategic Plan 2025–2029

Our Strategic Plan for 2025–2029 sets a bold vision and purpose, guiding our organisation toward a future of no deaths from breast cancer in Victoria.

This Plan is closely aligned with the [Victorian Cancer Plan](#) and the [Australian Cancer Plan](#), both of which emphasise inclusive participation in breast cancer screening and enhancing outcomes across priority populations.

Our people are at the heart of everything we do. This Plan highlights the focus and investment needed to build a supported, adaptable workforce, with strong program and clinical leadership and new capabilities, both now and into the future.

Developed through extensive consultation with consumers, service providers, staff, partner organisations, and government stakeholders, this Plan reflects a shared commitment to delivering equitable, high-quality breast screening services for all.



Understanding and acceptance of Position Description

Employee Signature: _____ Date: _____

Employee Name: _____

Manager Signature: _____ Date: _____

Manager Name: _____