Who is Kmart Australia?
Kmart is a leading product development company and a trusted retailer with more than 300 stores throughout Australia and New Zealand and over 37,000 team members. Kmart is recognized as one of the most profitable retailers in Australia offering customers a wide range of everyday products at the lowest prices.

Requirement for More Flexibility and Agility to Meet New Business Challenges
Like many other organizations, Kmart had relied on a mainframe infrastructure for over 25 years. This housed up to 30 mission-critical applications crucial to the logistics of running a retail business. The organization experienced rapid growth in the last five years. Kmart’s Group Head of Merchandizing and Inventory IT comments on the changing business requirements: “Our focus is on continued innovation to give our customers the best experience possible. Kmart has a ‘cloud first’ technology strategy and we felt we could respond faster to changing business needs if we virtualized our mainframe environment in the cloud. We were also aware that mainframe development skills are in short supply and with a modern development environment it would be easier to attract new talent. We felt we should be more efficient and productive, which in turn would give us cost efficiencies that we could pass onto our customers, reducing their shopping bill.”

The team recognized how virtualizing the mainframe environment in the cloud would improve their service considerably, making it easier to leverage new services, and create a scalable IT environment that would deliver substantial cost savings. An attempt was made to rewrite the mainframe applications for the cloud environment, but with over six million lines of code and little to no documented domain knowledge available on the business rules that underpin the applications, this was unsuccessful. The business relies on over 100 nightly batch jobs.

At a Glance
- **Industry**: Retail
- **Location**: Australia
- **Challenge**: Adapting technology environment to respond to rapidly changing business requirements while safeguarding business continuity
- **Products and Services**
  - Micro Focus Enterprise Developer
  - Micro Focus Enterprise Server
  - Micro Focus Enterprise Analyzer
  - Micro Focus Enterprise Test Server
- **Success Highlights**
  - Increased flexibility and scalability through AWS deployment
  - Faster development and more modern skillset
  - Advanced data analytics with single source of truth
  - $4 million annual operational cost savings
  - Innovation-enabled business models and new routes to market

“Intelligent data analytics drives data-driven decision-making. Leveraging the new infrastructure, we use machine learning models to more accurately allocate stock to stores, correlating sales directly with seasonal stock projections and loss analysis. We weren’t able to do this until Micro Focus helped us unlock the valuable data we have.”

GROUP HEAD OF MERCHANDIZING AND INVENTORY IT
Kmart
and working out what data is needed for which job and keeping it all in sync proved an impossible task.

**Safeguarding Business Continuity in a Remotely Managed Mainframe Migration**

“Business continuity is key for us,” says the Group Head of Merchandizing and Inventory IT. “We could not risk breaking the links in a complex interconnected system for which we didn’t have the foundation knowledge. Our market research into a solution led us to Micro Focus. Its Enterprise Developer and Enterprise Server solutions, with their high level of mainframe compatibility, allowed us to rapidly migrate our existing mainframe application code in an application replatforming exercise which we could then deploy in our chosen Amazon Web Services (AWS) cloud environment. This not only gave us the scalability we needed, but it also improved our fault tolerance and disaster recovery capabilities.”

Micro Focus participated in the architecture discussions and gave guidance in the design phase. As part of this, Micro Focus Enterprise Analyzer was used to understand and analyze the mainframe applications. Kmart’s internal IT team, in partnership with Infosys (Kmart’s chosen implementation partner), Micro Focus, and AWS coordinated a phased approach, allowing Kmart to celebrate success at every milestone and deliver incremental value to the business. Micro Focus Enterprise Test Server was leveraged to test the applications using a flexible infrastructure. “Finding the right partners was crucial to the success of this project,” acknowledges Kmart’s Group Head of Merchandizing and Inventory IT. “We secured executive sponsorship early on to make sure the business understood the value and was invested throughout the migration period.”

As the main migration period coincided with COVID-19 lockdowns, the team was not able to establish a ‘war room’ where all partners could physically get together to work through any issues as they appeared. Many Kmart stores were closed during lockdown which complicated testing efforts and caused some minor delays. However, the combined team managed to come together digitally and virtualized the mainframe environment onto AWS entirely remotely over a weekend.

**Data-Driven Decision-Making Opens up New Business Models**

While still in the process of creating a single source of truth and focusing on the data, the team can already use cloud services to connect to the rehosted, rationalized database on AWS. This creates a very different digital experience for the business as the journey to consolidate product data in a central location, which is currently distributed across different systems, has begun. The data is leveraged to solve different business problems and support new business models. “Intelligent data analytics drives data-driven decision-making,” comments the Group Head of Merchandizing and Inventory IT. “Leveraging the new infrastructure, we use machine learning models to more accurately allocate stock to stores, correlating sales directly with seasonal stock projections and loss analysis. We weren’t able to do this until Micro Focus helped us unlock the valuable data we have.”

He concludes: “We are delighted with the outcome of the mainframe virtualization. Not only has this given us annual operational cost savings of over $4 million, but the partnership between Micro Focus, AWS, Infosys, and ourselves has turned Kmart into a technology-enabled business, ready to grow and take on new routes to market and business models, while always delivering the best products at the best price to our customers.”