

AUSTPAC and Phone Banking Timeline

AUSTPAC and **phone banking** are deeply linked in the history of Australian financial technology. Long before the internet, AUSTPAC—Australia's first public packet-switched data network—provided the vital data infrastructure that allowed banks to move beyond physical branch transactions and introduce automated phone and electronic services.

The timeline below details how the two technologies emerged, intersected, and evolved:

1982: The Launch of AUSTPAC

- **Infrastructure Built:** Telecom Australia (later Telstra) launched **AUSTPAC**, a public X.25 packet-switching network.
- **The Impact:** It allowed remote computer systems to exchange data securely and affordably over standard telephone lines. It became the silent backbone for Australia's early financial networks, laying the groundwork for real-time data exchange outside of bank branches.

Late 1980s – Early 1990s: The Rise of Phone Banking

- **Early Adoption:** Backed by early data networks like AUSTPAC, major institutions began trailing telephone services.
- **1990:** Phone banking truly became a mainstream retail strategy. Systems like the Commonwealth Bank's *Phonebank* and Westpac's *Handyline* launched, allowing customers to check balances, transfer money, and pay bills 24 hours a day using Touch-Tone telephone keypads.

Mid-1990s: Peak Phone Banking & The Internet Shift

- **1995:** Phone banking reached massive scale. However, the landscape began to permanently shift when Advance Bank (later part of St. George/Westpac) launched Australia's first true internet banking service on **5 December 1995**.
- **1996:** Despite the emergence of the internet, telephone banking hit record volumes, scaling to millions of transactions monthly as automated interactive voice response (IVR) systems became highly efficient.

1999 – 2000s: The Shift to Mobile Phone Banking

- **1999:** The concept of "phone banking" began to split. Instead of just calling a landline number, major banks (CBA, NAB, Westpac, and ANZ) raced to introduce **mobile phone banking** using early internet-enabled handsets.
- **2006–2008:** Telstra officially announced the shutdown of the legacy AUSTPAC network in 2006. The network was fully decommissioned on **30 June 2008**, as modern broadband and IP routing completely replaced X.25 technology. Concurrent with this tech retirement, the launch of smartphones (like the iPhone) pushed banks to pivot toward standalone mobile apps.

Present Day: Phase-Out of Traditional Phone Banking

- Traditional, automated Touch-Tone phone banking has largely been phased out or relegated to basic backup accessibility features.
- Modern institutions have shifted completely to **in-app calling and digital authentication**. For example, [Westpac](#) routes customer service through secure in-app messaging or app-authenticated calling, while some digital-first entities like Macquarie Bank have fully scrapped automated phone payments in favour of digital-only channels.

Did BPAY use AUSTPAC before 2008

No, BPAY did not use AUSTPAC.

While both were pioneering Australian digital technologies, they operated on completely different systems:

- **BPAY** was launched in **1997** by a consortium of Australia's major banks. From its inception, it was designed specifically for internet and telephone banking architectures. By 2001, nearly half of all BPAY actions were executed directly online via standard web networks rather than older data systems.
- **AUSTPAC** was Telstra's (originally Telecom Australia) public X.25 packet-switched data network, which launched in **1982**. While major financial institutions, EFTPOS systems, and government agencies like the Australian Taxation Office (ATO) heavily relied on AUSTPAC during the 1980s and 1990s, Telstra began replacing it with modern secure IP-based networks in **2004**—well before 2008.

Because of the era in which BPAY was built, it bypassed the legacy AUSTPAC network entirely, utilizing the banks' proprietary banking networks and the burgeoning consumer internet infrastructure instead.

When did Visa start using AUSTPAC

Visa began utilizing Telecom Australia's AUSTPAC network in May 1988.

The integration was launched as part of a joint initiative with Telecom Australia (now Telstra) and the ANZ Bank to roll out the country's first credit-card-compatible public payphones.

The 1988 Rollout

Prior to this deployment, Australia's burgeoning Electronic Funds Transfer at Point of Sale (EFTPOS) systems primarily handled proprietary local bank debit cards via private bank networks. To allow public phones to instantly recognize and verify international credit cards like **Visa** and American Express, Telecom connected the credit card networks directly to ANZ Bank's data processing centre using **AUSTPAC lines**.

- **The Mechanism:** When a card was swiped, one dedicated AUSTPAC line encrypted the financial details and PIN codes, while a second line securely routed the authorization request back to the respective credit card headquarters for instant approval.

This setup laid early groundwork for secure, cross-network digital transactions in Australia, long before the entire banking ecosystem migrated to modern IP internet standards in the 2000s.

Are you researching the early history of **Australian EFTPOS and payment card infrastructure**, or are you looking for details on a specific **vintage telecommunications hardware** integration? Let me know so I can track down the exact historical context you need.

Early history of Australian EFTPOS and payment card infrastructure

The history of Australia's Electronic Funds Transfer at Point of Sale (EFTPOS) and payment card infrastructure is a story of fierce bank competition, rapid public adoption, and unique network design. While the global standard for card networks typically relied on centralised hubs, Australia built a system based on **bilateral agreements**, creating one of the first and most efficient national digital payment systems in the world.

1. The Pre-EFTPOS Era (1974–1983)

Before electronic point-of-sale systems, card payments were purely paper-based, slow, and relied on manual record-keeping:

- **The Birth of Bankcard (1974):** Because global players like Visa and Mastercard had not yet established a deep foothold in Australia, a consortium of local banks launched **Bankcard**. Merchants used mechanical "click-clack" imprinters to press a card's raised numbers onto carbon-copy paper slips.
- **The ATM Boom (Late 1970s):** Banks began installing Automatic Teller Machines (ATMs) and issuing plastic debit cards. For the first time, Australians memorised a **PIN**. This laid the behavioural groundwork for EFTPOS, as consumers became comfortable using a card and a passcode to interact with their money.

2. The Great EFTPOS Race (1984–1985)

In 1984, the race to move card infrastructure from the ATM to the retail counter officially began. Rather than launching a single, unified national network, the major banks competed aggressively, rolling out proprietary point-of-sale hardware tied to specific petrol stations and supermarkets:

Bank	System Name	Hardware Manufacturer	Launch Partner
Westpac	<i>Handyway</i>	Ericsson (Australian-made)	BP Petrol & Woolworths
ANZ	<i>Tranzway</i>	Burroughs	Shell Petrol & Coles
NAB	<i>Flexi-Pay</i>	Burroughs	Esso Petrol
CBA	<i>Eft Network</i>	Burroughs	Mobil & Caltex

Initially, these systems were completely siloed. If you had a Westpac card, you could only use it at a Westpac-branded terminal.

3. The "Gateway" Debate & Bilateral Links (Late 1980s–1990s)

As the infrastructure expanded, it became clear that consumers would not tolerate carrying different cards for different stores. The payment architecture faced a critical design choice:

- **The Telecom Architecture:** Telecom Australia pitched a centralised system using its public **AUSTPAC X.25 network** to route all retail transactions through a single public data switch.
- **The Bank Architecture:** The four major retail banks rejected the public utility model. They instead chose a **decentralised "gateway" structure**.

The banks won, building a web of **direct bilateral technical links**. By linking their systems, a customer from any bank could use their debit card at any merchant terminal nationwide. This decentralized architecture effectively locked out international cards, store cards, and non-bank competitors for years.

4. The Credit vs. Debit Split

A massive point of contention in early infrastructure was whether credit cards (like Bankcard, Visa, and Mastercard) should be allowed onto the EFTPOS terminal network.

- Local banks fought over this, wanting to protect their domestic debit networks.
- Consequently, the "EFTPOS" prompt at checkout was strictly reserved for **Savings (SAV)** and **Cheque (CHQ)** accounts, pulling money instantly from a user's deposit pool.
- Credit transactions were processed entirely via separate international routing rails (Visa/Mastercard). This separation defined the unique **"dual-network"** nature of Australian debit cards that persists today.

5. Centralisation and the Internet Age (2000s)

By the 2000s, the old system of direct bilateral bank links was becoming too heavy and expensive to maintain.

- In **2003**, independent fintech players like Tyro began introducing EFTPOS processing via modern, real-time internet protocols rather than legacy dial-up or data networks.
- To formalise governance, **eftpos Payments Australia Limited** was incorporated in **2009**, finally uniting the loose collection of bank agreements into a single, centrally managed domestic company.

Your comment The four major retail banks rejected the public utility model. They instead chose a decentralised "gateway" structure. But Visa and the smaller EFTPOS banks used AUSTPAC in 1988, correct?

The 1988 scenario represents a fork in how international credit networks and local bank debit networks were built in Australia:

1. Visa *did* use AUSTPAC in 1988

Because international card schemes like **Visa** and **American Express** did not have an existing, localized physical network across Australia, they relied on Telecom Australia's **AUSTPAC** packet-

switching lines to route authorizations back to international hubs or local settlement banks (like ANZ). A prime example of this was the May 1988 launch of public credit card payphones, which used AUSTPAC lines explicitly to process Visa transactions seamlessly.

2. The local EFTPOS banks (i.e. the "**Big Four**") *rejected* AUSTPAC for the retail network

While Telecom Australia heavily pitched its public AUSTPAC infrastructure (and a dedicated financial layer called **Tran\$end** in late 1987) to host the nation's standard supermarket and petrol station checkout terminals, the major retail banks said no.

Instead of routing domestic **Savings (SAV)** and **Cheque (CHQ)** transactions through Telecom's public data network, the major banks built their own **private bilateral lines** connecting bank data centre to bank data centre.

Why this split happened

- **Control and Cost:** The four major retail banks wanted to avoid paying Telecom Australia transaction fees on every single grocery checkout swipe.
- **The Resulting Layout:** This created a hybrid environment in 1988. If you swiped a local debit card at a supermarket, it travelled over **private bank gateways**. If you used a Visa card or used an early Telecom credit card payphone, it travelled over the public **AUSTPAC network**.

However, AUSTPAC *was* used heavily by **smaller, second-tier, or non-settlement financial institutions**, as well as the unique hybrid system launched by **Telecom Australia** itself. Because the Big Four refused to route their primary transactions through a public data network, smaller players and unique banking models used AUSTPAC as a workaround to gain a foothold in the ecosystem.

Which Banking and Financial Models *Did* Use It?

A. The "Agency" Model for Credit Unions and Building Societies

In the 1980s, Australia's building societies and credit unions (non-bank financial institutions) did not have the capital or infrastructure to build thousands of kilometres of private data lines.

- **The Setup:** To prevent their customers from being completely locked out of the national EFTPOS network, they formed **agency arrangements** with larger banks.
- **The Role of AUSTPAC:** These smaller institutions used **AUSTPAC lines** to securely route authentication requests from their localized databases up to the major banks' gateway networks.

B. The Public Utility / Merchant-Centric Model (Telecom's *Tran\$end*)

In November 1987, Telecom Australia launched a specific service layer built entirely on top of the AUSTPAC X.25 network called **Tran\$end**.

- **The Setup:** Instead of a merchant leasing an incredibly expensive private line from a single bank, a store could install a terminal and plug it straight into standard telecom networks.
- **The Mechanism:** When a card was swiped, Tran\$end used AUSTPAC's "multiple addressing" capabilities to look at the card type and dynamically route the transaction to

whichever specific bank held that customer's account. This was the exact network architecture used by **Telecom's Credit Card Payphones** in 1988.

C. The State/Regional Savings Bank Model

Regional and government-owned banks (such as the early **State Bank of New South Wales** or **State Bank of Victoria**) routinely utilized AUSTPAC dial-up access for remote, regional branch ATMs and low-volume point-of-sale terminals where running a dedicated private bank line was cost-prohibitive.

D. The Wholesale Investment & Corporate Banking Model

While not consumer "EFTPOS," AUSTPAC was heavily relied upon for corporate-to-bank data transfers.

- The **Australian Stock Exchange (ASX)**, the **TAB** (online betting), and corporate accounting departments used AUSTPAC to transmit overnight ledger files, share trading data, and tax file information directly to the major banks' mainframe computers.

Summary of the Split

The infrastructure was a patchwork. **The Big Four retail networks** operated on a **private billing model** over proprietary hardware links. **Everyone else**—international card networks (Visa/Amex), regional credit unions, public phone terminals, and corporate financial networks—relied on **AUSTPAC** to bridge the gap.

Would you like to focus on how the **Credit Unions and Building Societies** fought the major banks for equal access, or are you interested in how **Telecom's TranSend system** functioned at the merchant counter?

No, I think that's clearer. The Big Four would have invested large sums in their networks, from early days.

Exactly. The **Big Four** invested massive capital into their own proprietary mainframe and data networks, starting long before EFTPOS even hit retail counters.

When ATMs exploded in popularity during the early 1980s, these banks had already laid thousands of kilometres of **private, leased data lines** to connect their branch networks and ATM terminals directly to their central computer systems.

Because they had already sunk millions into building this heavy, secure infrastructure, their strategic goals were very clear:

- **Monopolise the Network:** By forcing all transactions through their private, bilateral connections, the Big Four effectively controlled who could enter the digital payment space.
- **Avoid "Clip-the-Ticket" Fees:** Routing transactions through Telecom Australia's AUSTPAC network would have meant paying a third-party telecommunications utility a fee for every single swipe. By keeping the traffic on their own lines, they kept 100% of the network fees within the banking system.

- **Leverage Scale:** Their massive financial muscle meant they didn't need a public utility to bridge the geographic gap across Australia—a luxury smaller building societies and international players like Visa simply didn't have at the time.

This early capital expenditure is precisely why Australia ended up with a highly unique, decentralized payment infrastructure that fundamentally shaped the domestic banking landscape for decades.

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