



Enabling Efficiency

**The Role and Value of LIXI Mortgage Processing Standards
within the Australian Mortgage Industry**



Prepared For LIXI Limited

brandmanagement

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1.0 About LIXI

LIXI Limited (LIXI) is the operating name for the Lending Industry XML Initiative, which is a not-for-profit, independent industry organisation established to develop a set of universal e-Commerce standards for home lending industry in Australia.

LIXI's stated goal is to enable the process of home lending in Australia for all participants including banks, aggregators, brokers, service providers and technology companies to provide a language of data and system standards that make lending as efficient as possible.

As LIXI's name suggests, these standards are built upon XML (eXtensible Markup Language), an enabling technology widely accepted as a critical and robust component for electronic commerce throughout the world.

The primary purpose of XML is to allow multiple users of data to share that data in a structured environment, particularly via the internet. This perfectly suits LIXI's stated intention of developing an industry language to allow home loan processing to occur in an efficient, frictionless environment.

1.1 How LIXI Works

LIXI is constantly working with the Australian mortgage and banking industry, refining and extending its e-Commerce standards to allow banks, brokers, borrowers and all other parties in the Australian home lending chain to communicate business-critical data electronically.

By developing these standards, LIXI is helping to lead the way to making the mortgage chain as seamless and efficient as possible.

To drive this development, LIXI, which is led by a board of volunteer members from across the industry, has developed a series of working streams that focus on specific elements of the industry.

These streams, which are formed into working groups, are responsible for developing the standard XML language in each of their areas, driven in part by industry need and in part by the recognition that the legislative environment in which the home lending industry is operating in is undergoing constant change.

The Vocabulary Working Group is responsible for managing the LIXI vocabulary, which acts as the superset of all LIXI systems and processes. This group works with all other working groups to ensure that consistency of syntax and content is maintained across all the systems being implemented.

This group essentially holds the master dictionary for the LIXI standards.

The Backchannel Working Group is responsible for handling the information systems in which data flows from the mortgage originator, back to a third party. This usually means data flowing from a bank which has written the mortgage, to a broker who has sold the mortgage and has a primary customer relationship.

This group has completed its tasks and handed over its work, and has now effectively been disbanded, but all future work in this area will follow the systems and processes developed by this group.

The Commissions Working Group has defined lender to broker transactions relating to commission payments (up-front, trail, bonus and adjustments) and is the process of refining and socialising this as a robust standard to be available across the industry.

The Implementation Working Group deals with the practical questions relating to the implementation of LIXI systems within all environments.

It's critical to understand that outputs from this group are recommendations only and the systems which are documented in the LIXI Implementation Guidebook are available to any interested party on the LIXI website.

The Mortgage Insurance Working Group is in the early process of gathering data for the Mortgage Insurance element of the LIXI process.

The Product Working Group is focussed on delivering the methodology and systems for describing products in a universal way, within the LIXI environment.

The Settlements Working Group is focussed on support for the settlement of a mortgage, including the settlement instruction transaction sent from lender to the settlement agent.

1.2 What LIXI is

LIXI is a group of financial services professionals that:

- Have come together to promote the efficient and seamless data transfer within the Australian home loan industry, by developing a set of data rules and standards within an XML infrastructure.
- Have a desire simply to create a system of standards or 'language' for lending to make the process of managing a home loan, from application to completion, better for all the participants in the business.
- Share information and processes with the sole aim of making transactions within the Australian home loan industry efficient and seamless, and with an aim of sharing that knowledge and allowing all members of the process to profit from this development.
- Share information and processes with the aim of making transactions within the Australian home loan industry efficient and seamless and of providing intellectual and technical leadership to the Australian home loan industry.

LIXI is an independent body that exists to benefit all members and achieve efficiencies in the home lending process.

LIXI is focussed on working with State and Federal Governments to make home loan processing as frictionless and seamless as possible in Australia.

1.3 What LIXI is not

LIXI is not for profit.

LIXI is not hostage to a single pressure group within the industry. It is interested only in the development of a better system for transferring data in the Australian home lending environment.

While recognising and learning from international developments, LIXI is not an international organisation.

2.0 Introduction

As the name of this paper suggests, one of the critical drivers of profitability in the home finance industry is the speed and efficiency of the home loan process.

At the time of writing this paper, despite tens of millions of dollars being spent over several years, almost all the mortgage processes in Australia remain in some way; paper-based, manual, prone to a significant number of errors and, in relative terms, expensive to run.

Beyond this, most of Australia's banks, building societies and mortgage originators have multiple mortgage processing systems operating to different standards, on different technologies, with different processes often within the same building and sharing the same staff and facilities.

That said, every company interviewed to produce this paper was in the process of re-engineering all, or some, of their home loan processes to improve their efficiency.

To understand where LIXI stood in the Australian home finance industry and what part they played in it, LIXI commissioned brandmanagement Pty Ltd (brandmanagement) to conduct a study of the relative efficiencies of lenders and mortgage aggregators in the Australian home lending market.

In particular they wanted to understand how well the key members of the industry understood LIXI and its role in the industry, how well the LIXI standards were being adopted and the potential economic effect of the adoption of the standards by the lenders.

To give this research a framework an interview guide and questionnaire were developed with members of the LIXI senior management and used as a guide for the research.

This guide included questions about all elements of the home loan, including their acceptance and understanding of LIXI and its standards, their plans for future developments, the cost elements and range of their home loan processing business.

This initiative has resulted in three core areas of this report:

- A broad perspective of the industry and the developments in plan now and for the future;
- A clear understanding of the use of, and plans for the adoption of, LIXI standards in the industry as it stands;
- A detailed understanding of the economics of the home loan processes in Australia, the scope of the inefficiencies that currently exist, and the role of LIXI in potentially improving them.

This research is the result of more than 100 hours of interviews with members of all of Australia's core banks, the largest mortgage brokers and aggregators, software and systems providers.

2.1 A Single Useful Model

One of the complexities which faces any research into the Australian mortgage lending industry, in particular one which is examining the cost infrastructure of the industry, is how to determine a model with which to usefully price the process.

Each of the banks and mortgage lenders run a myriad of loan processing systems of varying ages and levels of sophistication which means that there is very little that can be determined as a 'normal' home loan.

To overcome that this paper has used a model home loan which is as benign as possible.

Throughout this research we asked each of the banks and the mortgage aggregators to share the costs and issues with processing a home loan. To do that we gave them a detailed example of the type of home loan that we were using, as the costs vary so significantly with each type of loan, and indeed so significantly from lender to lender.

This allowed us to clarify which particular loan system the home loan would be passing through within the bank – what the critical process steps were, and which financing channel the loan would proceed through.

In many cases (representing more than 50% of the number of all home loans being written in Australia), we were able to access detailed average loan costs, used to build the economic model in section **5.0 The Economics of Adoption**.

2.2 The Model Home Loan

Through out this paper the home loan costs referred to are for a loan which fits the following description:

A home loan for a couple who have a combined income of \$200,000 per year and are purchasing their second property (next time buyers);

They have sold their home and have a deposit of \$125,000 and are seeking to borrow a further \$300,000; and have a one month settlement window.

It is critical to remember that the costing elements of this research cover the costs of processing a home loan only, and while it averages the cost of a broker-introduced loan and a bank channel-introduced loan (these vary by as much as 20% depending on the lender), the model does not include the charge for allocated overheads for the lender in a bank branch, nor does it cover the cost of the broker's commission.

2.3 A Seven Stage Model of the Process

The stages and processes that a home loan travels through on the path from customer need through to draw down and customer management can be long and convoluted, and vary from lender to lender. In researching this paper we needed to understand this process in detail.

With one of the banks there were upwards of 25 separate steps which needed to take place for a loan to move from application to customer management.

In fact, within these 25 steps were a series of filters, which, if triggered, mean that any loan moving through the process enters an entirely new review process before being completed.

To overcome this complexity for the purposes of this paper, these stages were aggregated into seven broad stages:

- Pre Credit
- Credit
- Funding
- Documentation
- Loan Approval
- Settlement
- Draw Down

It's critical to remember in section **5.0 (The Economics of Adoption)** of this report, where the cost and rework models for these stages are established, that none of the customer acquisition or sales channel costs are contained within the numbers provided.

This essentially means for each of the cost models developed, to gain a complete understanding of the cost of the home loan an interested party would need to include, in the case of a proprietary channel-introduced loan, a percentage allocation for bank overheads (staff salaries, advertising, rent, technology etc), and in the case of a broker-introduced loan, the cost of any commission and sponsorships paid.

2.4 Home Loan Costs - Mean, Median and Range

During the time this research was conducted, a number of the businesses we spoke to felt comfortable sharing their understanding of their own cost of home loan processing in varying ranges of detail.

Some agreed to pass on the gruesome detail of the elements of the cost of manufacturer, others simply rolled up amounts of the seven elements that this paper uses, and still others simply didn't know in any concrete detail what their real costs actually are and provided a company best guess.

What emerged was an industry in which the costs of production ranged so broadly that a simple average (mean) of the costs would be meaningless.

To overcome this in the cost section of this paper, we have narrowed the range to produce a set of median results – in the understanding that this would produce a cost base which is more representative of the industry.

The home loan processing costs ranged from a reported \$611.43 for one of Australia's biggest lenders to a *reported* \$4,211.00 for one of the smallest lenders. The median cost worked out at \$1,167.75.

2.5 The Path To A Efficient Process

Within the home loan industry one of the most significant destroyers of value in the path to taking a home loan from application to draw down is rework.

That is, the information which in the end will construct the loan contract once entered needs to be changed, re-entered or added to.

While the causes of rework vary significantly (from junk data to electronic process breakdown), there was a broad agreement that it is the most significant profit destroyer in the home loans business.

The banks themselves will cheerfully admit that less than 15% of home loans they currently process pass through the system without some form of manual intervention.

In one case, where the bank was able to perform a detailed assessment of the path of a loan through the process, they found that slightly more than 97% of all home loans from all channels were manually reworked at some point.

2.6 Market Size Data

All of the market sizing data used in this report is derived from the ABS, in particular the July 2008 Housing Finance Report (5609.0) which records the total number of mortgages July 2007 – June 2008 as 733,195.

2.7 The Quotes

Much of the information in this research report was derived from face to face and phone interviews, conference calls and group meetings held in Sydney, Melbourne and Perth.

Where quotes have been used to illustrate a point they appear in italics and in blue. Each of the interviews was transcribed and during that process each of the participants was given a number to enable the writers of this document to search the transcriptions.

In order to comply with the privacy legislation none of the interviewees are described by name. Instead, to allow us to efficiently process the quotes we have given their interviewee number.

3.0 An Industry in Flux.

In July last year the first murmurings of the global credit crunch began to infect the Australian home loan industry, bringing to an end what had been the longest and most benign period for Australian borrowers ever.

In the period between 1995 and 2007, the combination of; a reinvented credit process; the birth of a new channel of outcome focussed mortgage brokers, and hyper competition among Australia's banks and home lenders meant that home loan volumes leaped markedly.

The most reliable figures available from the Australian Prudential Regulation Authority (APRA) suggest that the market grew by 120% in the five years to June 2003 and continued to grow at a similar pace almost to the point until the credit crisis hit.

This means that for the past decade the biggest issues facing home lending organisations have been problems of dealing with growth in their own business, the sophistication and type of loans being offered and with a new third-party sales channel.

To just be able to compete, all the home lenders needed to move as swiftly as they could which often meant that business rules, in the past a bible for borrowing behaviour, were amended to ensure that growth targets were achieved. It seemed that business feared losing market share more than the strict adherence to the credit processes.

It also meant that new loan types, for example, Low Doc Loans, No Doc Loans, Fixed Rate Loans, Interest Only Loans and Portfolio Loans were introduced at a rate never before seen by the banks, as they scrambled to match each other's offer and to maintain market share.

In a bid to ensure that they could get these loans to market swiftly, in many cases new loan systems and processes were simply built alongside existing loan systems, using manual, paper-based processes. In businesses all over Australia these systems, or at least part of them, still exist in some form.

The fact that these processes were beset with internal errors and prone to rework was masked by the sheer volume of business being conducted. The business tension between the need for speed and the desire to build a rigorous seamless process was won by the desire to simply keep up with demand.

In July of 2007, the idea that this growth would be permanent and self sustaining evaporated which gave the lenders both the chance and the impetus to examine their systems, their cost base and their pay structures.

All of the banks and building societies which were spoken to during this process are in the processes of reviewing not just how much they are paying brokers, but what they expect from them in terms of data standards, contact standards and the way in which they do business in general.

All of them have some form of process review either underway, or in the planning stage and it's worth noting that this review process presents a significant opportunity for LIXI.

One of the simplest ways of breaking down the size and scope of the reviews taking place is in terms of budget currently allocated.

Budget Allocation	Lender Number
Project Budget Greater than \$90 million	2
Project Budget between \$50 and \$90 million	2
Project Budget between \$10 and \$50 million	2
Project Budget between \$5 - \$10 million	1
Project Budget of less than \$5 million	4

(All of these budgets are derived from interviews and should be treated as anecdotal – none of the actual budget papers were made available during this research process. In the review process for this paper with the interviewees these figures have been described as lower than expected.)

3.1 The Role of Third Parties

Each of the redevelopments underway in the industry is being driven at least in part by a third-party service provider.

These companies range from international software and consulting giants – like SAP, Oracle and EDS - to businesses which have built proprietary systems for home loan processing for their international business, which are being adapted for Australia (as in the case of HBOS), to companies that are being led through the process by Australian businesses, who specialise in this market.

In all cases these businesses bring a perspective to the rebuilding process and a perspective to the role of LIXI within their path to redevelopment. This relationship and LIXI's relationship with them is critical and this will be explored in greater detail in section **4.0 The Role of LIXI in the Industry**.

However, it's worth pointing out, and we will cover it in more detail, that each of these third-party businesses embraces LIXI in its own way. There is a significant danger that the staggered adoption, or modified adoption of LIXI standards, is creating a software time-bomb for these business when they come to adapt or modify their model.

4.0 The Role of LIXI in the Industry

All of the senior bankers that were interviewed as part of this research were aware of LIXI and its role in the industry – but there was a vast difference in their understanding of what LIXI did, what its goals and ambitions were, and its relevance in the industry.

There was a broad perception that LIXI had grown out of the need for banks to be able to deal with third-party businesses – in the main, the mortgage broking industry - and that this need had now passed. Therefore LIXI needs to once again communicate its goals, intentions, and the concept that it was a standards language for all elements of the home loan process, to the industry.

Indeed, there was a broad perception that LIXI had a role as a spokesperson for, and direction setter for, the entire home loan servicing industry.

There was a perception that there is a critical role for LIXI in the future of the industry to act as a third party in developing the future of systems used. In particular, this involves dealing with the potential changes in the way in which the both the Federal and State Governments operate within the Australian home lending industry.

The home loan industry was effectively split on whether or not the standardization of the manufacturing process of the home loan industry was, in fact, a creator or destroyer of value.

Some of the businesses that were interviewed, in fact, all but one of the big four banks, considered that their process was of proprietary value; that is having a system which was managed on standards that were separate and different to their competitors was something that created value.

The concept of proprietary value was in their ability to communicate with, exchange data with, and exchange value with their third-party channels.

It's in these elements of the process – where the desire is to create a process which some of the loan providers believe delivers them a financial advantage - that the role of LIXI is seen as particularly weak and has lead to the emergence of a series of what are effectively mutant standards.

4.1 The Emergence of LIXI Plus

“Oh yeah, well our system is based on LIXI, but we've improved it, a lot – we've adapted it for us, its kind of a LIXI plus now...”

Interviewee 186

One of the successes of the LIXI standards is that they are easily applicable to the home loan process; they are easy to understand and have been broadly adopted across the both the home loan industry and the software companies that support it.

However, both the home loan businesses and software businesses are in the constant search for ways to refine and improve their business. Their desire is, after all, to evolve their businesses, to be able to make their processes stronger and swifter to be able to out compete their competition.

The problem with this evolution is that unlike open source systems, where these developments are shared and the community benefits, in these instances the evolution to the system remains proprietary.

There are two arguments to this. On the one hand, the evolution of LIXI plus within an organization delivers them a benefit, which allows them to outpace their competition.

The corollary to this argument is, of course, that the development of a proprietary system means that the system is inflexible and effectively limits any ability for the business that is operating on a LIXI plus system to evolve quickly, if the industry does.

To be honest, this is the first I've heard that the LIXI we are using is not the standard LIXI, it's a bit of a concern, I mean what happens in three years, these guys may not even be with the bank then. How do we handle this then?

Interviewee 122

4.2 The Battle of One to One v. One to Many

During the interview process it emerged that most of the participants in the home loan industry considered the LIXI processes highly suitable for the elements of the home loan process where the home loan organization was dealing externally and where, in effect, the information they had was travelling from one to many.

This means that the elements that LIXI is deemed especially suitable for are: lender to customer, lender to third-party channel (typically broker and/or valuer) and lender to Government.

The area where LIXI was considered not particularly relevant to the home lenders was where the information was moving through the internal systems.

"LIXI is relevant to us because it's relevant to our third parties, particularly the brokers. I think its going to be important when NEC's finally kicks in, but it doesn't define our internal systems. It's more important that those systems communicate with the bank effectively than they talk to the rest of the planet."

Interviewee 103

"Look, we will use LIXI as much as it suits us and where it delivers us a benefit. I believe that our systems, especially the systems that we have developed to talk to the brokers deliver us an advantage in speed and accuracy, they're not LIXI and will probably never be, because that's a commercial advantage to us and something that we don't want to share."

Interviewee 114

"To be honest LIXI is a complete pain for me. I have to use it because I have to speak to the brokers. We have the probably got the best home lending system in the world, and in Australia, I have to spend millions to re-engineer it to be LIXI compliant."

Interviewee 107

4.3 It's An Australian Standard - Not an International Standard

All of the businesses that we interviewed for this research were in the continual process of updating and investing their home lending systems.

For many of the businesses, a great deal of time and energy is required to ensure that the front end systems - those that are application and product-specific - speak directly to the core banking systems; the engines that drive the banks' entire data warehouses and transaction systems.

Many of these core systems are built using world standard banking systems developed on systems like SAP or Siebel, using international teams sourced from EDS or PA Consulting.

These teams often have detailed knowledge of the banks core systems and mortgage transaction systems in general, but little view of Australian standards or the role of LIXI.

We aren't building an Australian standard system, we are building a system that is a world standard system, I've built systems in Canada and the UK and this will be an international standard and while LIXI might have a role in that, its certainly not going to define it.

Interviewee 121

I've heard of LIXI, but I don't know a lot about it. I'm going to rely on our Australian partners to tell me if it's important or not.

Interviewee 122

4.4 The Speed of Evolution

One of the factors that will determine the success of the LIXI standards is the rate of adoption it has among Australia's biggest home lenders.

While all of the home lenders that were interviewed were embracing LIXI in some shape or form, the speed at which LIXI becomes a true industry standard will be the speed at which it achieves broad-based adoption across the board.

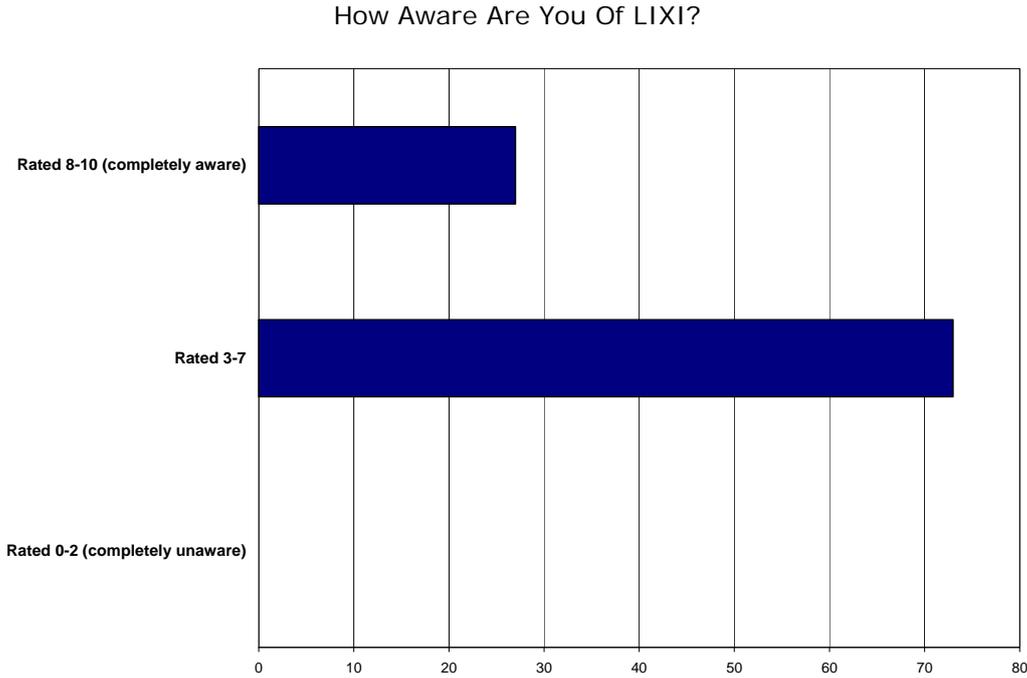
The positive news for LIXI is that for two of Australia's biggest home lenders, the LIXI standards are forming a core part of their system redesign and evolution on pure LIXI standards, which means that better than 35% of all of Australia's mortgages will be processed using pure LIXI standards.

Like most groups, these banks are going through a process of rolling rebuild, redeveloping the elements of their systems as time, budget and market need dictate, and it's this pace which will define the broad-based adoption of LIXI.

4.5 The Industry’s Relationship with LIXI

As a part of this process we wanted to explore the industry’s broad relationship with LIXI Limited. In each of the 11 interviews with senior executives from Australia’s banks, credit unions and mortgage brokers, we asked a standard set of questions about LIXI and its role in the industry. This section of the paper deals with those responses.

4.5.1 General Awareness of LIXI



Interviewees were asked to rate their perceived understanding of what LIXI provide on a 0 – 10 scale – where 0 is completely unaware of what LIXI provides and 10 is completely aware of what LIXI provides.

On a self-rated basis all of the respondents felt that had a good or very good understanding of the goals and intentions of LIXI.

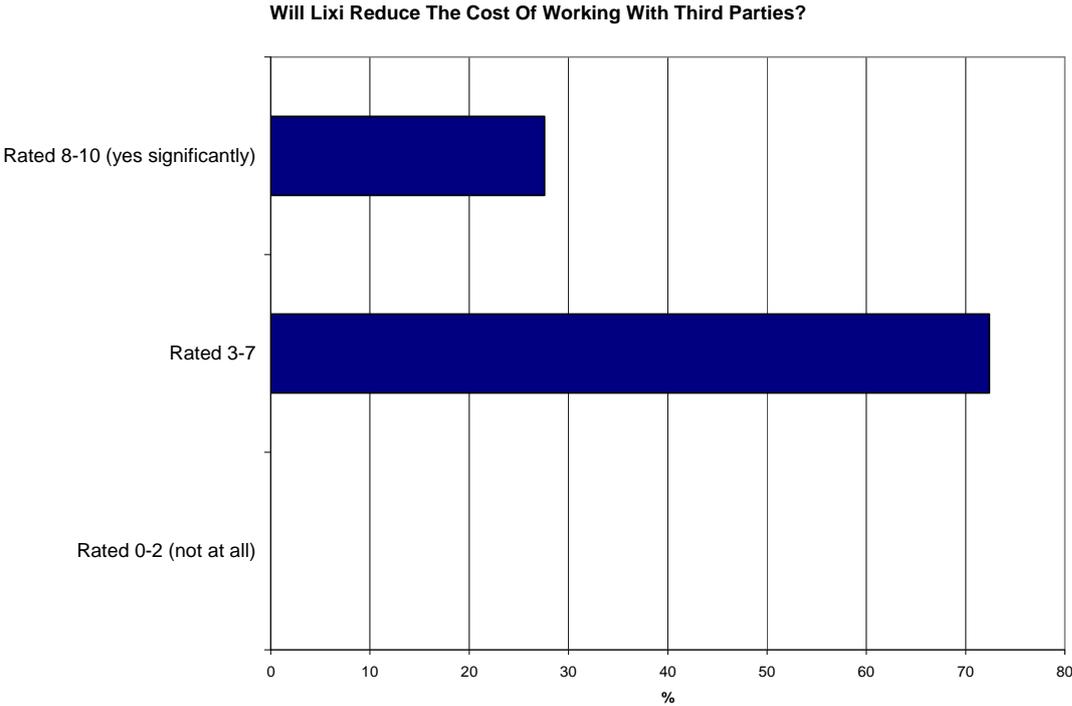
However, when pushed, many of the respondents had relatively limited knowledge of the full goals of LIXI.

*LIXI, it’s the mortgage brokers and valuation standard. It’s for dealing with the broking industry.
Interviewee 122, Sydney*

4.5.2 LIXI’s Role in Third-Party Cost Reduction

One of the acknowledged benefits of the adoption of standards is that they will, if applied properly, drive down the costs of new development and process management.

The role of LIXI in driving down costs in working with third parties was broadly acknowledged by the industry participants



LIXI drives down costs of working with external suppliers? Well, yes, by and large. Especially companies that are experienced in the home loan business – in the main, it means they are ready to go pretty quickly, especially companies like NextGen, Sandstone and Allette, LIXI is really the basis of their business.

Interviewee 112, Sydney

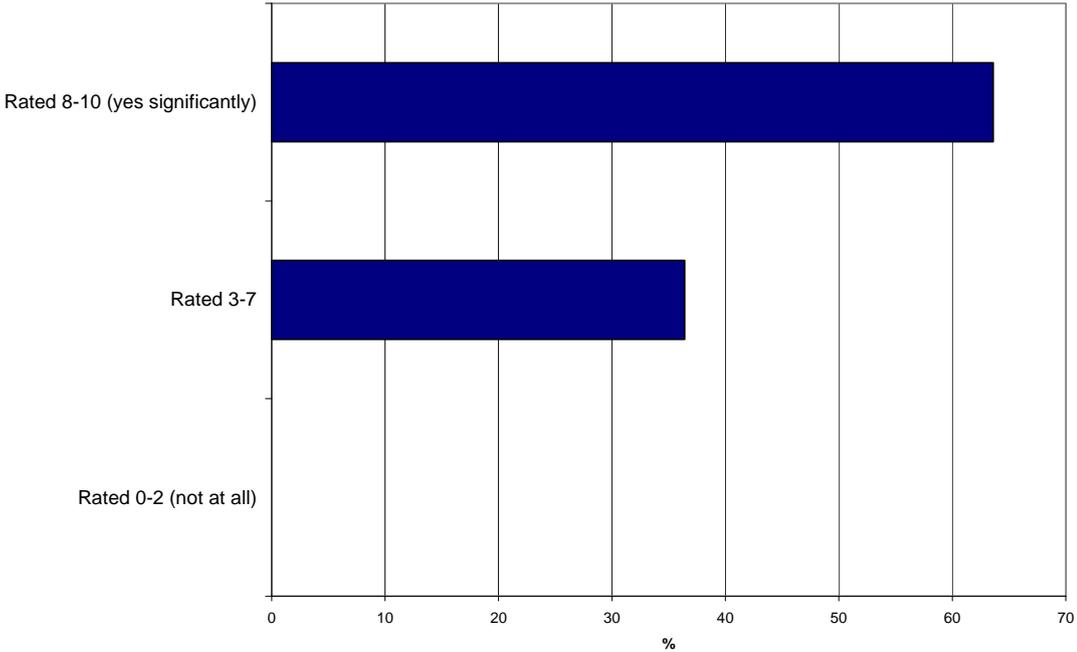
LIXI doesn’t change the cost of working third parties any more. It did once absolutely but it’s now everywhere and everyone uses it – so some of the cost efficiency in using it has gone. It’s like switching from electricity to gas; once you’ve switched the cost change is incidental.

Interviewee 143, Melbourne

4.5.3 How Much Will LIXI Reduce Data Entry Costs?

One of the biggest costs drivers in the home loan industry is the need for data re-entry – either from poorly entered original data, incomplete data or when the data is required to move from system to system.

Will Much Will LIXI Reduce Data Re-Entry Costs?



Data re-entry is the bane of my life. Especially from broker applications. The data is wrong, it's in the wrong spot or it's simply not all there. What I want is a LIXI front end that forces them to fill in every field and forces them to get it right. We can do it for credit cards, why not bloody home loans.

Interviewee 123

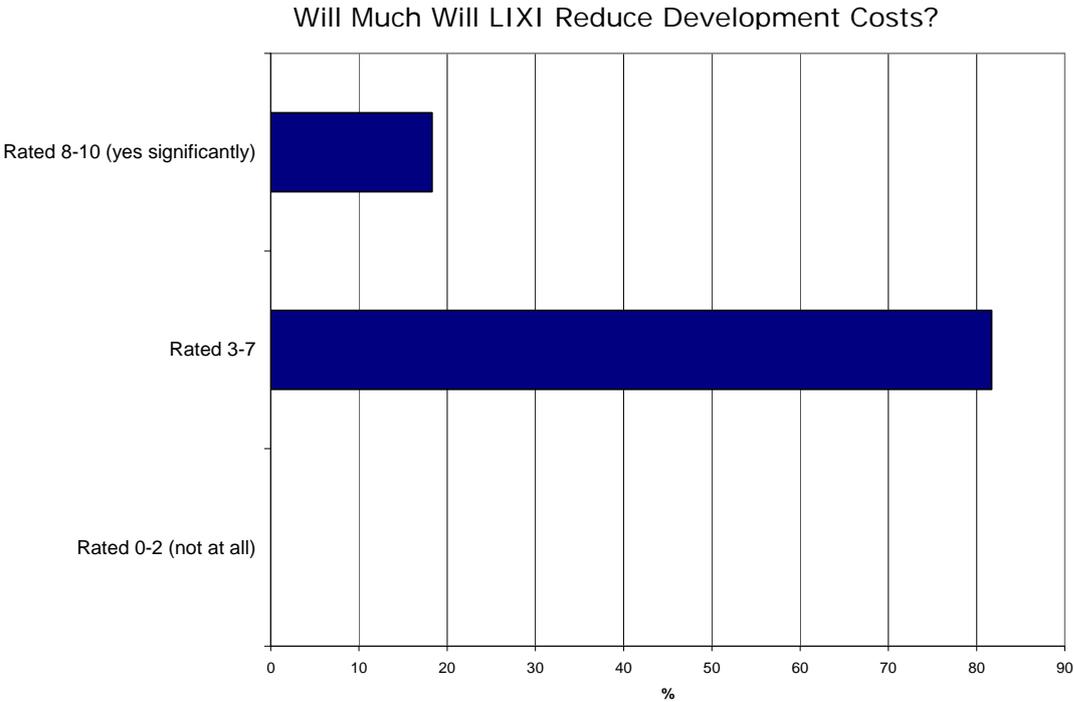
But others were more prosaic.

LIXI won't change the data re-entry costs – that's mainly human error, not systems. What LIXI does is deliver systems to standardize the elements of the loan. Partly that's data re-entry, but mainly it's about a way of doing things.

Interviewee 117

4.5.4 Redevelopment Costs

The industry was effectively divided on whether or not LIXI would effectively drive down redevelopment costs. While some members that were interviewed considered this a key benefit of the LIXI standards, others considered the adherence to and redevelopment of systems to match the standards a driver of costs.



The biggest costs in my business at the moment are making [loan system name deleted] fit with LIXI, so no it doesn't reduce development costs for me, it builds them, so that's a 3.

Interviewee 107

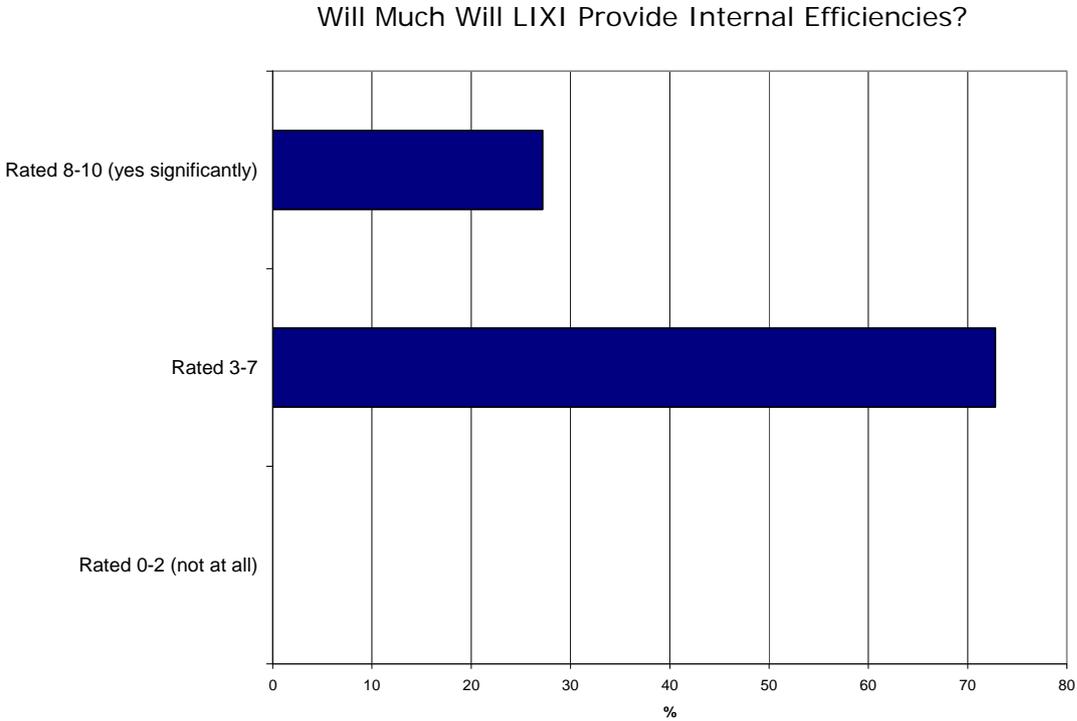
It doesn't really change the costs. The redevelopment cost isn't more or less if it's done using LIXI standards. That's like asking of the cost of a contract is less if it's in English.

Interviewee 123.

LIXI keeps costs down, absolutely. If it wasn't for LIXI we'd be pasting systems and standards together all over the place.

Interviewee 117

4.5.5 How Much Will LIXI Provide Internal Efficiencies



The broad consensus of the interviewees was that LIXI would not provide internal efficiencies to the industry.

In some ways this reflected the poor understanding of the intent of the LIXI standard.

However there were some other reasons for this:

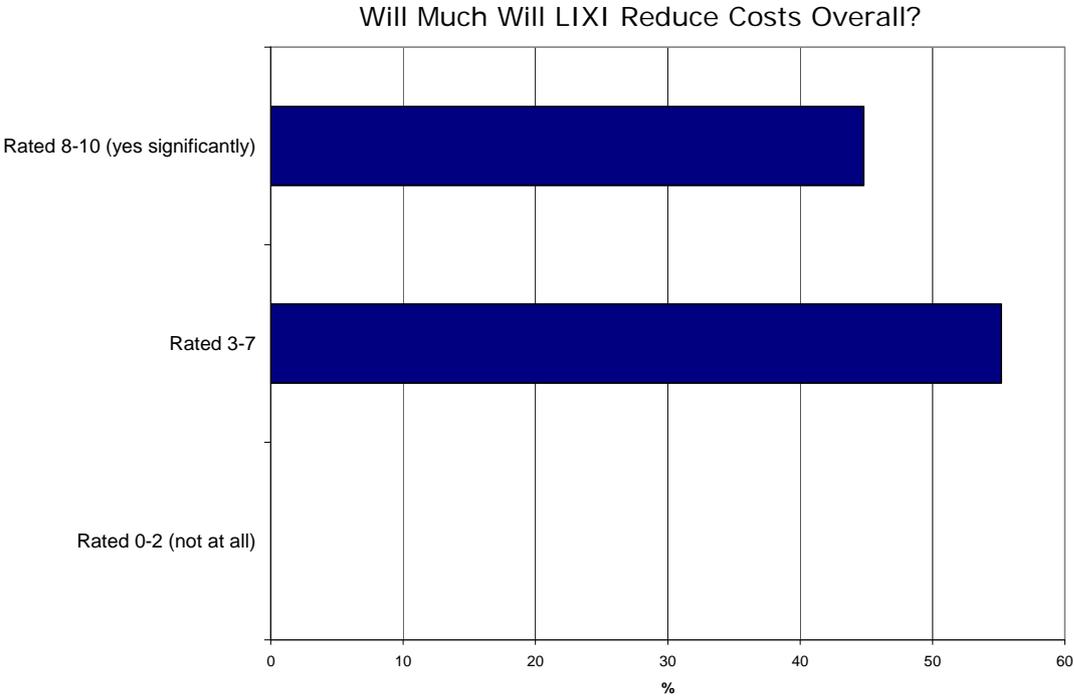
LIXI will only provide internal efficiencies when it's end to end. Right now when I am talking to our guys about where the breakdowns in the system are, I hear – well that's not a LIXI compliant system and when I say why, they say, well, LIXI doesn't have a protocol for doing client communication, so we have to do it ourselves and I know that somewhere in the future, somewhere down the line, we will have to re-do it, because someone will say that system isn't compliant.

Interviewee 143

The LIXI systems aren't finished. Or if they are, we aren't aware of it. I mean there are the broad standards, but my need right now is for back channel standards and I'm not sure they have one – do they?

Interviewee 173

4.5.6 Reduce Costs Over All

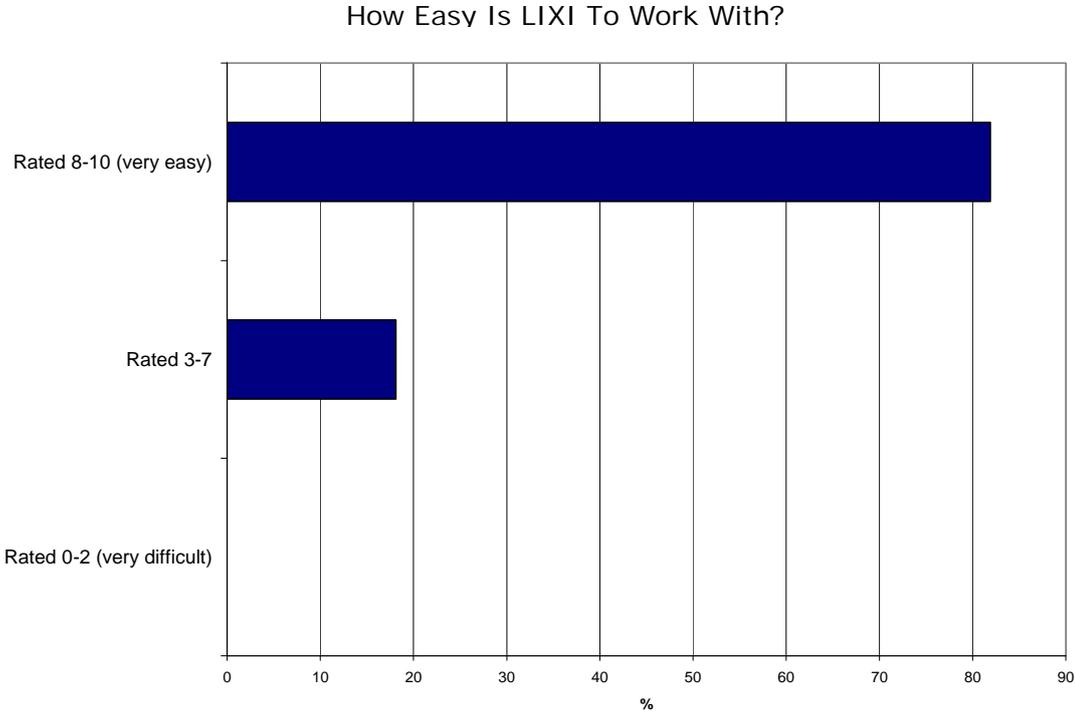


The interviewees were evenly split on if LIXI would reduce costs overall. In the main' they saw value in the standard, but thought that there was little cost saving to be gained from adopting the standard.

Look, we use LIXI and we like it, it gives us a way to think about designing our systems and a way to talk to everyone, but I don't know that it's more cost-effective than any other standard. If it was truly universal then, yes, it would reduce costs. I mean, it's great for us to hook up with the like of Mortgage Choice and AFG and even Aussie, but until it goes from valuation to settlement - then it's just another system. And they better look out, we've had RP (RP Data) in here talking up their valuation systems, it's a good offer.

Interviewee 143

4.5.7 How Easy Is LIXI to Work With?



One of the positives of this research is that over all LIXI was rated very easy to work with.

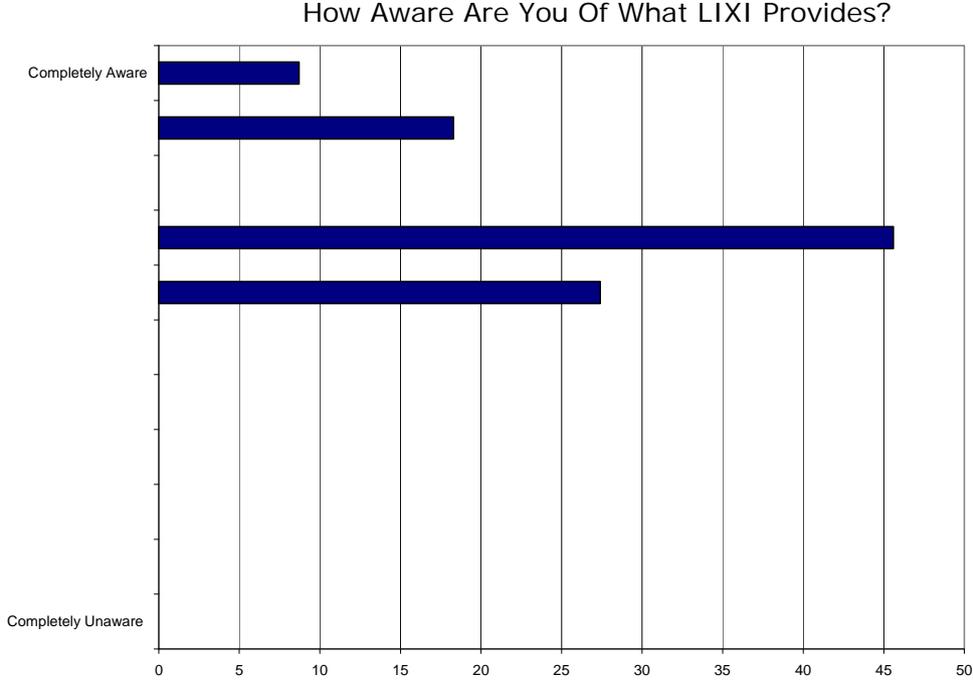
LIXI are very good really, very serious and quite quick to react. I've been to their information evenings and I've read their material, they are on the right track.

Interviewee 171

I like them, they are interested in getting things right, but they are a chronically under-resourced and they should really be funded by the Government. I mean I know that the Government, that NECS and (name withheld) from there is looking at them in particular as a model of how to do things.

Interviewee 123

4.5.8 How Aware Are You Of What LIXI Provides?



Curiously when the interviewees were asked what LIXI provides and how it might help their business they candidly admitted that they were not that aware of what the depth of LIXI's offer.

5.0 The Economics of Adoption

Deciphering the economics of the home loan process within the Australian home lending industry is a complex and in many ways impossible task.

A myriad of systems, manual processes, types of real estate, and other elements too numerous to mention means that few, if any, of the lending companies have a highly accurate picture of what their home lending process truly costs.

In truth the processes range vastly, from systems which are almost entirely automatic moving bar-coded scanned documents swiftly through each element of the process, to systems which from valuation to execution are almost entirely manual.

The range of data accuracy and the range of system type meant that the data range and cost range provided for this research was significant.

The most cost-effective business – a relatively recent entrant to the home loan industry claimed a loan cost of just over \$600 per loan.

The most expensive process recorded a cost of over \$4,000 per loan.

Because the range of loan amounts was so significant, it was decided that the outlying home loan costs would be removed and that instead of working with the mean (average home loan amount) that this research would focus on using the median as a location parameter.

In the home loan process there are innumerable costs, both hidden and obvious, which eat at the profitability of the business - real estate, IT, man hours, wages, rework among many others.

This paper deals only with one element of cost reduction – the one which is the most obvious to the manager and the one which would be most affected by the adoption of a fully LIXI compliant process – the somewhat mythical 'straight-through-processing'; rework.

We have chosen rework because many of the home loan businesses have a very good understanding of how much rework is occurring, what causes it and how the adoption of LIXI standards would drive it down.

Almost all of the businesses that we interviewed were happy to share all or some of their business data in some detail, and when presented with the model which was developed as a part of this process, were able to engage with it and enter in their own details to develop an average industry cost of home loan process.

5.1 Time as a Cost

One of the biggest loss drivers in the home loan process is time lost – the hours destroyed as loans sit waiting for new data or for input to be moved through the system.

This causes both man hours to be lost and loans simply to be written elsewhere (most businesses were operating on a stated 3:1 lead-to-close ratio before the loan entered the system proper).

While lost time and lost business may be among the most significant costs in the process, it was decided that this should be excluded from the numbers as being too difficult to measure accurately.

5.2 The Seven Core Elements of the Home Loan process

In a bid to develop a standard model of a home loan process, after working with the home loan businesses that were interviewed, a seven stage home loan process was developed.

Those stages are:

- Pre Credit
- Credit
- Funding
- Documentation
- Loan Approval
- Settlement
- Draw Down

During the development of this model there was some debate about whether this model should also include post-draw down, customer management but it was decided that it should be left out of this model.

Through the interview process, either face to face or via email, we asked each of the businesses to estimate - as effectively as possible and as honestly as they were able to - the cost of each element of their home loan process, the rework required in each element and the cost of that rework.

5.2 The Model Loan

Throughout this paper the home loan costs referred to are for a loan which fits the following description:

This home loan is for a couple who have a combined income of \$200,000 per year and are purchasing their second property (next time buyers).

They have sold their home and have a deposit of \$125,000 and are seeking to borrow a further \$300,000.

They have a one month settlement window.

It is critical to remember that the costing elements of this research cover the costs of processing a home loan only and while it averages the cost of a broker-introduced loan and a bank channel-introduced loan (these vary by as much as 20% depending on the lender), it does not include the charge for allocated overheads for the lender in a bank branch, nor does it cover the cost of the broker's commission.

5.3 Brokers and Bank Lenders

One of the most significant discrepancies to arise in the first phase of the data was that there is a significantly different cost for a broker-introduced loan to a bank or channel-introduced loan across the industry.

The industry average for a broker-introduced loan was: \$ 964.61
The industry average for a bank-introduced loan was: \$1,221.43

In the review phase of this paper, the lenders broadly agreed that these figures represented an accurate description of the costs of generating a loan.

5.4 The Working Model

This model does not cover the entire cost of the loan as calculated by the banks, brokers and building societies which contributed to this paper. It covers the elements highlighted and only the hourly costs of the people involved in the process – it does not consider advertising, building costs, commissions and all the other elements associated with having a home loan business.

Entity Name: Avg Bank	Loan Application Processing	Credit Decision	Funding Decision	Document Creation	Loan Approval	Settlement	Loan Draw Down	Total
Initial data management cost								
Time (Hours elapsed avg est)	2.5	1.5	1	2	2	8	2	
Hourly rate (est\$)	\$80	\$60	\$50	\$45	\$35	\$50	\$55	
Total initial cost	\$150	\$90	\$50	\$90	\$70	\$400	\$110	\$960
Rework Cost								
Time (Hours avg est)	0.5	0.3	0.3	0.5	0.65	0.8	1	
Hourly rate (est \$)	25	60	50	45	35	65	65	
Total secondary cost	\$13	\$18	\$15	\$23	\$23	\$52	\$65	\$208
Other cost (non-time based not counted)	0	0	0	0	0	0	0	0
Total data management cost	\$163	\$108	\$65	\$113	\$93	\$452	\$175	\$1,168
Potential saving in each stage	7.7%	16.7%	23.1%	20.0%	24.5%	11.5%	37.1%	21.6%
Potential saving relative to total saving	6.02%	8.66%	7.22%	10.83%	10.95%	25.03%	31.29%	

It is impossible for this model to be correct for every individual business, but great care has been taken to get as many and as accurate inputs as possible.

The model is available from LIXI for members that want to enter their individual data and generate a personal result.

With these inputs this model indicates the cost of the average home loan process in Australia is approximately \$960.

The average cost of the rework on this home loan is \$208 or expressed as an additional 21.6% cost on the loan.

5.5 The Range of Rework Amounts

The concept and range of rework within this research was a hotly debated topic.

Some of the businesses claimed rework rates as low as 10% of all loans, others stated candidly that better than 97% of their loans had to be handled manually and reworked in some form.

Once again the range was so large that the median figures were used to create the model.

5.6 The Role of LIXI Standards in Creating Value

All of the people interviewed for this process agreed that the broad adoption of LIXI standards would drive out a significant proportion of rework from the business.

If this is true, then the value of adopting LIXI standards is relatively easy to determine.

Between July 2007 and June 2008 the ABS reported in the Housing finance report (5609.0) that there were 733,195 new home loans written in Australia.

Therefore to estimate the total current cost of processing home loans in Australia:

Total Number of Home Loans (ABS Data)	733.195
Average cost (@21.6%)	\$1,168
Total Annual Cost	\$856,371,760

These figures indicate that the current cost of home loan processing in Australia is more than \$855 million p.a.

5.7 The Potential Savings

Currently the cost of rework constitutes on average almost 21.6 % of the cost of a loan being produced in Australia.

It's unrealistic that the broad adoption of LIXI standards would eliminate rework completely.

Indeed of the interviewees that responded to this question, most considered that the adoption of LIXI standards and the achievement of a form of straight-through-processing would cause the rework rate to halve to approximately 10.8%, which in turn would make the average cost \$1064.

So the new total cost of home loans processed in Australia would be expressed as:

Total Number of Home Loans (ABS Data)	733.195
Average cost (@10.8%)	\$1,064
Total Annual Cost	\$780,119,480

This would mean that the potential saving from broad adoption across the industry of LIXI standards that encompassed the mortgage value chain could potentially be expressed as follows:

Potential Saving Calculation	
Total Estimate Annual Loan Cost	\$856,371,760
Minus reduced cost	\$780,119,480
Potential Annual Saving	\$76,252,280

These calculations indicate that by reducing the rework rate alone in the Australian home loan processing industry, LIXI standards could play an important part in delivering a \$76 million *annual* saving to the industry.