About i-Trade Wool

i-Trade Wool is an Internet-enabled direct-selling platform – web and mobile – that links growers and processors via the Internet while still utilising the existing industry logistics infrastructure.

The i-Trade Wool trading platform was developed in response to the need for improved efficiencies in the fine wool supply chain and to the desire of growers and processors to communicate openly and directly to develop new product innovations and brands.

Innov8 Pty Ltd t/a i-Trade Wool

11 Kadina Street
North Perth WA 6006

Contact: Stephen Rice

Email: srgroupbiz@gmail.com

Mobile: 0413 515 177
Achieving long-term success requires a paradigm change

In i-Trade Wool’s decade of attempts to gain traction of its industry platform, the most significant impediment (that we found) to improve the selling of wool was dealing with systems that exist in response to the fundamental mistrust between participants in the supply chain. These systems were developed in a pre-Internet age, resulting in an inefficient, fragmented, resource reliant, very costly supply chain.

In the Internet age, problems of mistrust between parties are better handled with a centralised auction and clearing house, combined with robust feedback mechanisms that reward good behaviour and punish bad behaviour.

i-Trade Wool’s goal is to bring the benefits of Internet-age auction houses to the trading of wool, with specialised tools to help selling participants maximise their returns. By looking at the wool industry from a “holistic” perspective, we believe that the industry can achieve long-term success, sustainability, and resilience.

A perfect example of this is eBay; eBay started with a simple auction platform and then over time added feedback and fulfilment systems that encompassed all facets of a general goods supply chain (payments, freight & logistics, buying & selling tools). As eBay’s systems have matured, those wishing to participate as either long-term sellers or buyers must conform to the highest standards of probity.

A systems overhaul; a holistic approach; a new paradigm is the only solution!

A partial solution is not a viable option. A band-aid on a broken leg can never work.
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Current Systems

- Manual processes
- Data Flows reduce
- Fragmented Flows
- Bottlenecks
- Resource reliant
- Handling /re-handling
- Start / stop
- No memory

Each step less information is carried forward due to system bottlenecks, re-entry and re-handling of data
Industry systems analysis – i-Trade response

Streamlined flow of information...
Operational benefits grow with each step

**Proposed**
- Electronic processes
- Systems reliant
- Real Time
- Has memory
- Smart phones/devices
- Unbroken Flows
- Data Flows build
- Accurate data
- End-to-end
- Simplicity – mouse clicks
- Optimisation
- Handle exceptions only
- Online auction
- Interface, integrate with legacy systems, testing, logistics and finance
i-Trade... solution & vision

End-to-end solution

Integrates with existing legacy systems

Online auctions

A catalyst for transformational change

Is more than just broker management software for wool

Trading platform for all fibres & long-life agricultural commodities

Internet-enabled supply-chain management system
i-Trade... how it works

Online auctions

Motivates producers to enter data online by providing detailed reports.

Broker Management

A back-end application for brokers to manage the wool once it enters their custody. Integrated with Talman et al.

Data Management

An auction system allows brokers to run competitive auctions online.

Farm-gate

On-farm documentation drives the broking and sale process.
i-Trade... why it is better

Has “memory”

Automated, constant data stream – rich in information

Best producers will be rewarded, others motivated to lift their game (A ‘separated’ system with independent parts can’t have memory)

Uses the unbroken chain of data to make each stage richer and more automated (others require manual input and stop-start at the interfaces between them, losing data)

Concentrates on the total sale cycle (others only fix part of the cycle, ignoring the links)

Flows from farm-gate to buyer
Supply chain management phase... farm-gate to wool store

- Farmers register and enter wool book online
  - Farmers record their shearing into i-Trade, which auto fills documentation
  - Brokers know when shearing has commenced; the wool bales by number, description and weight
  - Brokers therefore can anticipate storage space, delivery times and quality (based on client history)
  - Data resides with the wool broker, creating client lock-in

- Brokers receive the bales and mark them “received”
  - This is simple inventory tracking that links the warehouse with the office
  - All done with mouse clicks because the data entry commenced on-farm

- Brokers lot up received bales for sampling
  - Brokers use a simple interface using the data from the online wool book
  - Any discrepancies in the wool book can be corrected by the broker
  - During core/grab sampling the sample is AWEX-Typed and stored with the lot
i-Trade Wool – Module for brokers

Brokers
Saves time, Saves money, Gets new business for licensees

- **Innovation** - transforms the way you and your clients do business in wool
- **Best Practise** - Optimise in-shed recording of shearing information and electronic transfer of data
- **Reduce Costs** - Provide administrative savings and ultimately reduces sales costs
- **Increase Sales** - Give your sales and marketing team new tools that have practical on-farm advantages (eg wool book, NWD etc)
- **New Clients** - Provides the opportunity for producers not on your client list to utilise the system. They do the data entry thereby becoming a client of yours and building a barrier of entry to your competitors
At shearing time, enter information in your online wool book—simply & easily from your iPad

When shearing is complete, print and electronically transfer NWD and classer’s spec report to broker’s management system

Wool sampling and typing performed by broker on core line. Broker orders wool testing by AWTA

AWTA Certificate electronically transferred to broker’s management system. Broker lots up wool

Catalogues automatically produced, open-cry and/or online auctions proceed

Free to Use

Fees Payable

Classers specification & NWD

Catalogue Allocation, Sampling & Typing

Testing & Lot Confirmation. Online/offline Catalogue

Auction
Search for wool lots based on your specifications e.g. Micron, Yield %

Enter a bid for the wool lot up to a maximum price, or buy it immediately

Post-sale, confirm the lot’s details are as agreed, then payment is made and the wool delivered
i-Trade Wool online auctions

Running wool auctions through i-Trade Wool has significant benefits:

- No dependence on auctioneers
- Faster turnaround from warehouse to auction room
- Design your own selling timings
- Sellers can confirm their own reserve price automatically
- Better integration with your own banking and finance

i-Trade Wool can develop tools for exporters to automate their work e.g.

- Let buyers store wool specs online (we have a version of this online)
- Let buyers create a container with a designated wool spec
- Allow searching for wool on spec, but assign the lot they bid on to a container
- When a sale is made, the container fills up
- When a buyer's container fills, all bids for that container on other auctions are withdrawn

There is only a limited number of auction participants (exporters) ... 30?... (essentially 12)

It should not be a great challenge to get them to try another system
Phase 3 – Wool Appraisal

The Review Panel is seeking input on the item of wool appraisal and valuation.

*Can a combination of AWTA test results and a singular, industry accepted valuation standard provide an online platform for wool to be appraised and valued? If so what efficiencies and costs savings (if any) can be achieved?*

i-Trade Wool worked with a number of wool brokers. It was estimated at the time that over 50% of the wool sold was completed without physical inspection. The wool was simply purchased from test results.

*To what extent is physical inspection a necessary element of appraisal and valuation? Would the woolgrower be disadvantaged by relying solely on appraisal and not displaying the physical wool sample?*

Physical inspection is only necessary for either coarse/poorer or fine wools – the need for inspection becomes greater the further the wool is “from the mean”. For the coarser wools, this can be costly in comparison to the price paid. Perhaps, AWEX could provide some guidance and/or photography of the wool to allow more confidence of sale without inspection.

*Should the industry be seeking to achieve a wool selling system based entirely on sale by description?*

Yes. Wool is tested at least as thoroughly as other long life commodities such as wheat, which is mostly sold via electronic exchanges. At the very least all AAAM bales with standard micron lengths should be sold on description.

*Are multiple systems needed to address diverse buyer needs?*

Conversely, buyers would benefit most from a single selling system so as to provide a critical mass of wool that may be purchased.

i-Trade Wool also came to the view that such a system needed to provide a series of electronic purchasing calculators to help with tasks such as fill containers and managing currency risk.

*Could woolgrowers exercise more discretion in the type of tests performed on their wool in order to save costs?*

If the goal is to sell wool consistently, the types of testing done should be standardised throughout the industry. But there should be tiers of testing based on the woolgrower’s judgement of the wool “on the farm”. That way, coarser wool can receive less (expensive) testing, and finer wool can receive more (expensive) testing.
Phase 4 – Price Realisation

The Review Panel is seeking information and evidence on the effectiveness of the current open cry wool auction system as a mechanism for competitive and cost effective price realisation, in particular:

*If the auction system delivers the highest level of competition for growers’ wool are there more cost and time effective methods that would ultimately benefit the woolgrower (for example: online selling) and would these savings be passed down to the woolgrower?*

i-Trade Wool is of the belief that the best model for selling is a single electronic marketplace. Our initial model was through online auctions, which provide the most transparent means of selling commodities.

i-Trade Wool’s system allowed for wool being stored “on the farm” to be sold
Phase 6 – Export Process

The Review Panel is seeking information on the export process and the scope to reduce costs and create further logistical efficiency. The Panel has a particular interest in:

whether there is scope for the exporter and processor sector of the industry to leverage its combined scale to negotiate more competitive freight rates from shipping companies and freight forwarders.

i-Trade Wool, as an auction house for wool (and other long-life agricultural commodities), would be able to complete fulfilment and shipping requests automatically upon sale. By its very nature, the more volume i-Trade Wool would have been able to process, the better it could negotiate more competitive shipping rates than any other entity in the market.

whether the exporter sector of the industry can leverage its combined scale to negotiate more competitive rates from wool dumps and whether there is scope for an industry owned and/or managed facility.

i-Trade Wool, as the main auction and clearing house, would by its nature be able to negotiate the best shipping rates, and eliminate need for an industry owned facility.

the exporter’s ability to achieve consistent and competitive funding lines from banking institutions, particularly considering a high percentage of wool is shipped prior to receiving payment for the goods.

i-Trade Wool was not designed to directly address this, but in a role as the main auction/clearing house for the wool industry, would be in a position to negotiate an aggregate finance deal from financial institutions for industry participants. Risk, however, would still be borne by the exporter.
Phase General – Wool Industry institutions

The Review Panel is seeking information on the following areas that do not fall within the 6 phases of the selling process referenced in this paper but relate directly to the overall scope of the Review.

AWEX undertakes a variety of tasks, including market reporting and ensuring accuracy in wool description, that help the wool market to perform efficiently. In a similar vein, AWTA supports market efficiency by providing critical data describing the range of wool characteristics. Would there be advantage in combining the activities of AWEX and AWTA?

If i-Trade Wool was adopted as the industry’s preferred electronic trading platform, market data from sales could be automatically reported to buyers and sellers, removing this function from AWEX. With the sale and market reporting mechanisms handled by i-Trade Wool, AWEX’s remaining functions – accuracy in the clip – could then be combined with AWTA.

Is there an opportunity to increase competition in wool testing services currently provided by AWTA? Should woolgrowers be able to nominate what tests they would like performed on their product and pay accordingly for the services provided?

i-Trade Wool believes that to guarantee integrity in the auction process, wool testing should be standardised. If wool growers were to nominate the testing to be done, it is likely that a “race to the bottom” would ensue, with growers choosing the least expensive testing option. This would be of detriment to the industry as a whole, as buyers would be less trusting when buying from description only.

A better model would be to standardise the tests that must be undertaken, but to open the testing process up for competition. i-Trade Wool talked with SGS about providing testing services in New Zealand and South America. There should be no reason as to why SGS can’t provide these services in competition with AWTA.
Are there other changes to the institutions serving the wool industry that would reduce costs or enhance returns associated with the first exchange of wool ownership?

i-Trade Wool (i-TW) believes that its software was on the road to becoming the de facto platform for the wool industry. i-TW’s systems were designed to capture information at the very start of the process (shearing) and then feed that through to each stage – classing, testing, lotting, sale, export – ensuring that the

If i-Trade Wool’s systems were allowed to mature and to take their place in the middle of the wool industry, this would lead to simplification and cost reduction of the remaining institutions in the industry, while at the same time providing maximum benefit to industry participants through an open auction process.

Talman Solutions provide the majority of wool exporters and a large number of wool brokers with inventory management IT systems. Do the systems provided by Talman Solutions generally meet the requirements of their customers? Is there potential for greater competition for this service offering within the wool industry?

i-Trade Wool’s experience of Talman Solutions’ products for the wool industry was that they only tackled parts of the sales experience, so contributed to multiple handling problems, and their associated costs.

i-Trade Wool’s solution was a holistic offering where data entered by farmers generated data that was used by brokers. This offered a number of substantial benefits for brokers – reduction of data entry work, forecasting of transport times from farms. Sales data then would be used to generate automated export documentation, and to feed back the growers on the performance of their flocks.

Any solution that replaces or competes with Talman should encompass the entire sales process so data can be captured at all points of the shearing/testing/sale/export process and fed back to the wool growers so as to improve their wools.
Phase General – Digitalisation

The Review Panel is seeking information on the following areas that do not fall within the 6 phases of the selling process referenced in this paper but relate directly to the overall scope of the Review.

*Can Australian wool be appraised without physically handling a wool box sample? And if so would that appraisal be accurate enough to allow an exporter or processor to deliver wool in accordance with a specific mill or customer's requirement?*

Yes. Originally, i-Trade Wool was a system for farmers trading wool online before shifting focus to wool brokers. As part of that original brief, a kit was developed for farmers to sample pressed wool bales on the farm, and then to send to sampling with AWTI or SGS. The kit would need industry support to take beyond the prototype stage.

*Can price realisation between the seller and the buyer be achieved via an online platform whilst still maintaining a comparable or improved level of competition for woolgrower's wool?*

i-Trade Wool believes that an online auction system can help transparency by reporting past sales history by sellers; buyers would be able to view past sales by a seller, and review the previous quality of the wool. Sellers with better wool would be rewarded over the years.

A purely online system with sufficient volume would also invite speculators that would add liquidity to the market. This would mean that sales would be more likely, leading to more competition and a truer sale price.
Phase General – Digitalisation

What cost saving benefits can be achieved by online appraisal and or selling? And who would benefit from it?

Significant savings can be made in the following areas:

1. Reduction of double/triple-handling: i-Trade Wool’s system used the data entered in the wool shed when the wool is classed to drive the entire appraisal and sale process. At present this data is entered multiple times by testing authorities, wool brokers and auction houses.

2. Automatic generation of pre- and post-sale documentation. All documentation that constitutes the complete sale process – sale information, export documentation – can be automatically generated from pre-existing information about the wool to be sold, and the buyers and sellers themselves. This includes all elements of the sale process such as matching test results to a clip, timing of a wool auction, and generation of export documentation.

3. Reduction of transaction costs – re-using the data within the system – wool, sales, buyer, seller – means that transactions such as bank transfers, wool transfers can be scheduled automatically, reducing manual data entry.

Why have previous attempts at the online selling of wool failed?

i-Trade Wool believes that previous attempts at online selling have failed because only one stage of the process was addressed in each of these products, leaving the costs of the current system in place. I-Trade Wool was a holistic attempt to capture wool information at the farm and have that flow through the whole sale process.
The Review Panel is seeking information on the following areas that do not fall within the 6 phases of the selling process referenced in this paper but relate directly to the overall scope of the Review.

Why has there been minimal woolgrower adoption of these alternatives?

i-Trade Wool’s experience with the industry was that the traditional wool industry supply chain evolved to solve the problems of trust that exist between the end buyer and the wool grower.

Alternative wool selling methods will not be taken up until the issue of trust in the quality of the product between buyer and seller can be resolved.

i-Trade Wool’s systems were designed to solve that trust problem, and thus enable all forms of selling wool.

Are there up front cost savings offered to the woolgrower by the wool-selling broker to use these selling alternatives?

In a traditional sales model, any system where the buyer could sell wool without transferring it to “middle men” (brokers, exporters) would save costs and return more money to the wool grower.

However, traditionally, without wool testing by organisations such as AWTA, and presenting of sample boxes for auction, the maximum price for the wool could not be achieved.

Part of i-Trade Wool’s system was to offer on-farm wool testing, to allow the wool to remain on-farm until the wool was sold.

Does the industry have the necessary skills, knowledge and expertise to utilise these options?

i-Trade Wool encountered some who exhibited these skills when we presented to the industry. However, a major roadblock we encountered was due to the cyclical nature of the industry; when times were good, everyone wanted to cash in – no money for investment – and when times were bad, there was no money for investment.

i-Trade Wool also found that no one organisation wanted to improve the industry, and that it was a matter of a large number of individuals to come together to support our initiatives. No one was willing to invest on their own if there was not widespread industry adoption.
Phase General – Selling Alternatives

Are there training initiatives the industry should examine to enhance the skill base necessary for uptake of alternative marketing options?

No – a better solution would be to invest money in order to develop a trading platform for the industry to allow the maximum benefits of such a system to flow back to industry participants.

Do the above selling alternatives provide the same level of competition for woolgrowers' wool as traditional auction?

It would be better to ask whether the alternative selling mechanisms can yield a better return to the wool grower as opposed to more competition.

Alternative selling mechanisms can deliver better returns, but only if the trust is the same as what exists for an auction model – the costs could be lower, and the end price the same, leading to better return for the wool grower. i-Trade Wool’s system builds a rich data set for each wool grower over time as sales are made. Buyers can use this to obtain certainty about purchasing more directly from a wool grower.
The Review Panel is seeking information on the following areas that do not fall within the 6 phases of the selling process referenced in this paper but relate directly to the overall scope of the Review.

What forward selling mechanisms currently exist in the market place for wool producers? What systems might be introduced and are worthy of further investigation?

i-Trade Wool’s system is an attempt to simplify the wool selling process, and to capture all data that is generated at each of the cycle.

i-Trade Wool believes that a pre-condition of effective forward selling is an accurate history of wool grower’s clips. Our system help achieves this by having the farmer enter mob/flock information along when bales are originally recorded at shearing time. This data is kept with the wool all the way to the end of the sale, and then in one central repository for all time afterward.

Sellers have access to a client’s sale history (quality, price), and buyers get quality and sales information that can be traced back to an individual mob/flock. If a system like i-Trade Wool is in place for several years, it then becomes possible for wool growers to predict their quantity and quality before shearing and testing, and for buyers to have confidence that both the quality and quantity of wool can be provided.

We envisage a system where buyers would have their favourite growers and then bypass the auction process for a direct sale instead.

In other markets, automation and connectivity has made it easier for the development of derivatives products such as futures and options. Would such products create new hedging opportunities for woolgrowers and other market stakeholders?

Yes, with the proviso that the buyers can trust the product that is sold. i-Trade Wool’s system builds a rich data set for wool growers over time, from which buyers can then forward purchase with confidence. When offering items for forward sale, wool growers would be offered “context-specific” tools to allow the setting of an appropriate price.
The Review Panel is seeking information on the following areas that do not fall within the 6 phases of the selling process referenced in this paper but relate directly to the overall scope of the Review.

Would there be benefits to the woolgrower by unbundling and making transparent the existing costs within the supply chain to allow them to be more selective in the services they adopt?

i-Trade Wool believes that this is not the right way to reduce the cost in the system. The best way to reduce cost is to rethink the supply chain and enable the selling of wool via an electronic exchange that benefits wool growers and buyers.

An whole-of-supply-chain electronic exchange by its very nature should result in automation benefits that far outweigh disaggregation of the existing supply chain. This is because there is a minimum set of steps in the supply chain that are fundamental (“Table 3”) – an electronic system than encapsulates these steps then automates them would be the optimal solution in this case.
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

**i-Trade Supply Chain Management and online auction system**

**Test Results are automatically matched to a wool lot...**

- Sellers can immediately be informed and go on-line to view their test results, thereby increasing their knowledge.
- With the test result and wool type the broker can notify the producer of the anticipated reserve price of the wool lot.
Features, Advantages & Benefits

The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

i-Trade Supply Chain Management and online auction system

Broker lists lot automatically for sale...

- Producer confirms Broker reserve price or suggest an ‘upset price’ (reserve price)
- Wool can be listed for sale immediately the reserve price is confirmed
  - There is no need for "boxing and inspection" period for the ‘bread and butter’ wool before the auction date
  - (Massive) Saving on concrete show floor space that can be sub-let or sold
- An online "Pricing Grid" feeds directly from the system into the reserve price when listed
- No catalogues necessary as the wool can be auctioned at any time for any duration
- Less errors and pressure for buyers as the "auction window" for a wool lot can now be much greater
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

No dependency on an auctioneer...

- No more bottlenecks due to single point (of failure) - the auctioneer
- Floor space is saved
  - Warehousing can occur where it's cheaper
  - No need to run a dedicated auctioning facility
- "Passing-in" wool (handing back bought lots) and going to the offer board are redundant
- All these functions are corollaries of the electronic auction system
  - In fact, as long as the wool remains within the offering broker's stores, it should be able to be resold without re-inspection
We can now tailor a system that benefits the entire industry... for example ...

- Lots are selected to be auctioned on Wednesday
- All auctions start at 5pm Tuesday, allowing buyers to place bids before the morning
- The first auction ends at 9:00am, then one ends every 30 seconds until 2pm
- This is 840 auction lots per day - to get more simply compress the time between auctions or extend end of day
- Lightning round - 3pm to 4pm opportunity to sell surplus lots ... a form of "offer board"
- Day starts again with new listings at 5pm

The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

**i-Trade Supply Chain Management and online auction system**

**At Auction, the Wool Sellers...**
- Have the ability to accept a fixed price before the reserve price is hit
- Can see the bidding on their wool lots, but not who the buyers are (Only the broker can see this)

**At Auction, the Wool Buyers...**
- Put their specs under their profile and be notified (by email, SMS) when matching lots are listed
- Set the maximum they are willing to pay early on in the auction, and then ...
- The system make sure that the winning buyer pays the minimum they need to
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

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### i-Trade Supply Chain Management and online auction system

#### The Sale Process...

- All the account sales and invoices documents are created automatically
- Sellers automatically notified of how much they received for their wool and when they will be paid
- Accounting entries (ledger entries for account sales, invoices) are automatically added to a general ledger or sub-ledger
- Buyers automatically notified of their financial obligations, and their own ledger keeps a record of the total outstanding
- Buyers may opt to turn around and sell their purchases (while still in the broker's warehouse)
  - Allows them to speculate
  - Adds volume to the trading system
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

i-Trade Supply Chain Management and online auction system

Funds Settlement...

- Corporate Banking file is produced for automatic funds payments to wool producers
- Payment obligations from buyers are netted and late payments can be identified upon settlement date
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

i-Trade Supply Chain Management and online auction system

Dumping/Consignment...

- At the end of each day, a list of bales sold that need dumping/tri-packing can be identified
- The dumping company and the warehouse can be notified daily of their obligations for the next day
- The transport/export documentation can be produced and sent with the consignment
  - This reduces warehouse time
- Warehouse staff can be notified when the wool may be released to consignment (subject to credit etc)
- Warehouse times post-payment can be recorded, allowing for penalty charges for late payment
  - Depending of course whether credit is offered or not
The more the wool selling system is connected and streamlined, the more the benefits increase exponentially (spiral)

i-Trade Supply Chain Management and online auction system

Over time...

- Sellers can be informed of the prices they received down to the mob and bale
  - Combined with the sheep's colour tag, this means they can track how mobs perform over time
  - This leads to improved breeding
- Buyers can store their buying profiles online
  - These can be used over and over
  - Sellers can be informed of what buyers are asking for
  - Buyers can "bookmark" their favourite sellers and purchase from them regularly