

Leather Working Group

28th January 2010

Sao Paulo

Brazil

The
Gibson-
Bass
Hide
Stamper



Joe Gibson

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The Ideal Hide Identification

- ❑ **Unique code on each hide**
- ❑ **Human Readable / Human Decodable**
- ❑ **Hygienic, safe, for application on a kill floor**
- ❑ **Readable on grain and drop**
- ❑ **Software driven code**
- ❑ **Code can be externally generated**
- ❑ **Selectable No of digits eg 4, 5, 6, 7**
- ❑ **Applied while the hide is still on the animal**
- ❑ **Lasts through to finished leather**
- ❑ **100% Retrieval**
- ❑ **Readable with hair on and hair off**
- ❑ **Machine Readable**

Some years ago some colleagues and I brainstormed what would make the ideal hide identification system. We came up with this list. Let me tell you that to make a hide ID system that achieves all this is a big ask. It is one that would not have been achieved without a large dose of Government assistance. So I am not surprised that no one else has done it. In fact I did not set out to do it. I set out more than 20 years ago to set up a system of feedback of price and quality signals to improve the quality of Australian hides. It turned out that a crucial part of that exercise was to build a hide identification system. This was by far the hardest part of the exercise. I will come back to the hide identification device, but to put it in context I want to tell you about the whole system, and how it came about.

The Meat & Livestock Australia Hide Improvement System

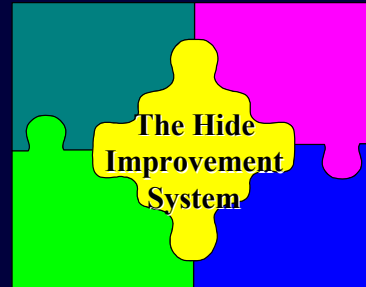
Project ran from 1992 to 2000

Cost \$2.6 million

Independent Evaluation

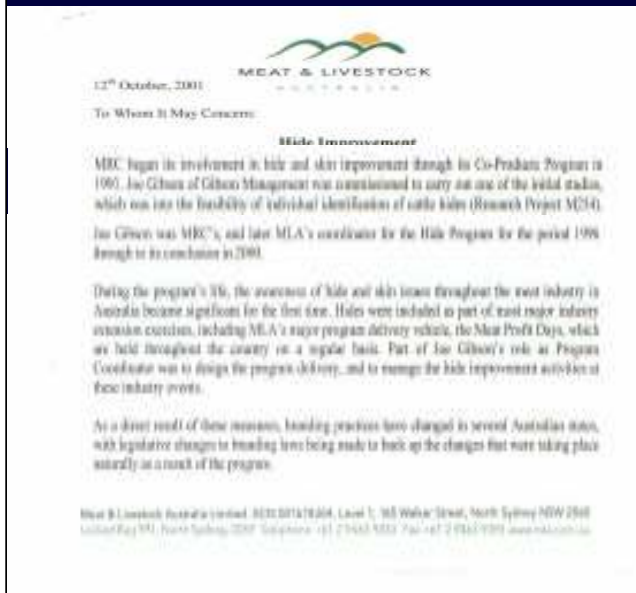
Report 1999:-

**Positive Program economic impact
of between: M\$5.6 & M\$15.4 per year**



When I was President of the Australian Tanners' Association I kick started a hide improvement program. Later as a consultant to the industry, I project managed the Meat and Livestock Australia hide improvement program. It ran from 1992 to 2001, and invested \$2.6 million of Government Funds. An independent Evaluation Report stated that this \$2.6 million returned between \$5.6 m and \$15.4m per annum, so it was a very successful project.

The Meat & Livestock Australia Hide Improvement System



12th October, 2001

MEAT & LIVESTOCK
AUSTRALIA

To Whom It May Concern:

Hide Improvement

MLC began its involvement in hide and skin improvement through its Co-Products Program in 1995. Joe Gibson of Gibson Management was commissioned to carry out one of the initial studies, which was into the feasibility of individual identification of cattle hides (Research Project M214). Joe Gibson was MLC's, and later MLA's coordinator for the Hide Program for the period 1996 through to its conclusion in 2001.

During the program's life, the awareness of hide and skin issues throughout the meat industry in Australia became significant for the first time. Hides were included as part of most major industry association exercises, including MLA's major program delivery vehicle, the Meat Profit Days, which are held throughout the country on a regular basis. Part of Joe Gibson's role as Program Coordinator was to design the program delivery, and to manage the hide improvement activities at these industry events.

As a direct result of these exercises, branding practices have changed in several Australian states, with legislative changes to branding laws being made to back up the changes that were taking place naturally as a result of the program.

Meat & Livestock Australia (incorporated), 30/31/32/33/34, Level 1, 96 Walker Street, North Sydney NSW 2060
Locked Mail 991, North Sydney 2060. Telephone: (61) 2 9443 5333 Fax: (61) 2 9443 9391 www.mla.com.au



I have a letter (which is available in full on my web site) from MLA written after the finish of the project, which says

Joe Gibson was commissioned to carry out one of the initial studies which was into the feasibility of individual identification of cattle hides. During the program's life awareness of hide and skin issues throughout the meat industry became significant for the first time. As a direct result (of the project) branding practices have changed.

The Meat & Livestock Australia Hide Improvement System

Joe Gibson has been actively involved in driving the hide improvement program from its inception. He has been responsible for strategy development, vision building, planning and delivery of the program. The program was managed in a professional fashion, with program budgets and milestones being well documented and properly administered.

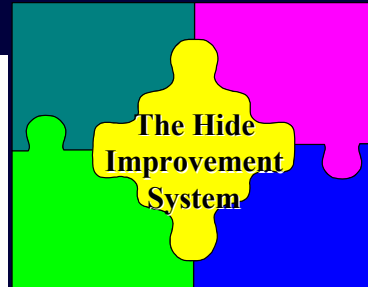
Joe Gibson is well known throughout the industry for his dedication to this project. He is well respected for his determination to see the project succeed, his commitment to the cause of hide improvement, and his expertise in this area of the industry.

I would commend Joe Gibson as a trustworthy, dedicated and experienced advisor to any company, Government or organisation.

Yours sincerely



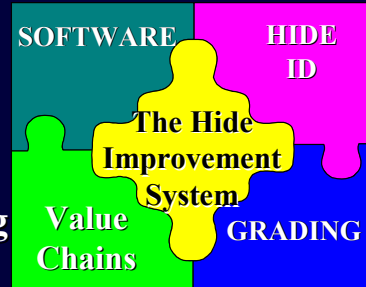
Leri Stephens
General Manager,
Livestock Production Innovation



Joe Gibson has been responsible for strategy development, vision building, planning and delivery of the program. The program was managed in a professional fashion, with program budgets and milestones being well documented and properly administered. I would commend Joe Gibson as a trustworthy, dedicated and experienced advisor to any company Government or organisation.

The Meat & Livestock Australia Hide Improvement System

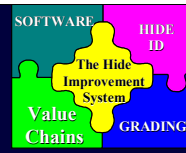
- 1) **Hide ID**
Hide Identification
- 2) **Grading**
Objective Quantitative Grading
- 3) **Value Chains**
Feedback System for Marketing hides
- 3) **Software**



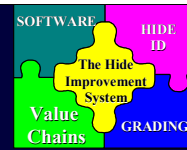
Software providing a complete **Grading , Inventory and Control** system for tanneries

The Program was made up of 4 elements, Hide ID, Objective Quantitative Grading, building supply chains in the industry, and development of software to allow data collection, process control and information flow. I will discuss these in turn.

Objective Quantitative Hide Grading



Objective Quantitative Hide Grading

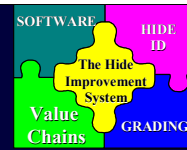


Hides can be graded for their attributes eg:

- ◆ BRANDS
- ◆ SCRATCHES
- ◆ PARASITES/DISEASE
- ◆ ABATTOIR DAMAGE
- ◆ TANNERY DAMAGE
- ◆ and any other damage eg **DUNG**

As money was going to change hands based on the quality of the hides, we needed an objective, accurate and reliable method of determining the quality of the hides. Over a period of several years I developed and refined a method of grading hides called Objective Qualitative grading. The hide's attributes ie its defects, can be identified separately.

Objective Quantitative Hide Grading



Each of these attributes can be **quantified**,
and given a score out of 5

5 is the **best**

1 is **very bad**

0 indicates a **reject**

Quantitative definitions can be developed
for **objectively** grading hides

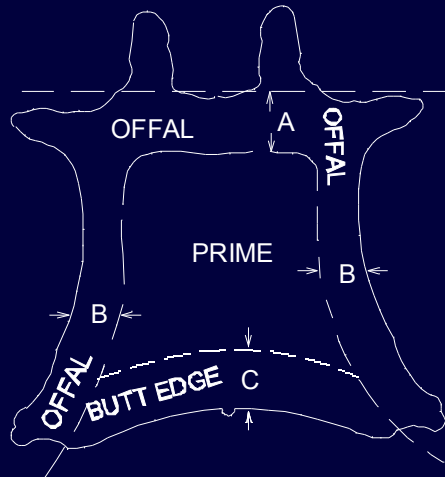
Each of them can be quantified, and given a score out of 5. You can score them out of anything, but we found 5 was large enough to be discriminating, and small enough for a grader to handle easily.

Objective Quantitative Hide Grading

DEFINITIONS

◆ eg Location

- ◆ A = 54 cm
- ◆ B = 18 cm
- ◆ C = 30 cm



You can also precisely define what a particular score means. For example you can define the placement of the damage on the hide, either in the prime or in the offal. We also had a “Butt Edge” defined where it was not so bad to put a brand, but scratches and parasite damage was considered more damaging in this area.

Objective Quantitative Hide Grading

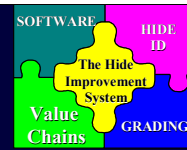
DEFINITIONS

- ◆ **eg Size**
- ◆ A **LARGE** brand is bigger than an A4 sheet of paper
- ◆ A **MEDIUM** brand is less than an A4 sheet of paper
- ◆ A **SMALL** brand is less than a half an sheet of A4 (ie A5) paper

For example, with brands we defined the size, eg small medium and large, based on an easily available measurement. We developed simple rules for grading all the attributes.

Once you have these measurements, you can then use them to define a grade. For

Objective Quantitative Hide Grading



It can then be used by a computer to automatically grade hides - **“Jumping Hurdles”**

	Brands	Scratches	Parasites	Tannery	Abattoir	Other
A	5	5	5	4	5	5
B	3	4	4	3	4	4
C	2	3	3	2	3	3
D	1	1	1	1	1	1
R	0	0	0	0	0	0

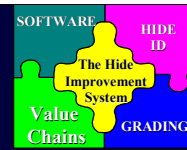
Graders can be trained in what each score means. They can grade consistently. Any grading changes can be made in the computer

The big advantage of this system is that the graders can grade consistently to the scores, rather than having to subjectively pick a grade. The grading profile can be set up in a computer, and the computer can manipulate the data to calculate a grade, based on the information supplied by the grader.

For example, if you have a special order from a furniture manufacturer, who says “I can take high levels of tick, as I am buffing the surface, but I can not tolerate open scratches, you can set up a special grade in the computer with the parasite level say at 2, but with the scratch score at 4. In this way you do not have to confuse the graders, and they can keep grading (recording the scores) consistently.

The way grading is done traditionally, is for the grader to look at a hide, and gather all the information needed to grade the hide. They then in a split second, give the hide a grade, and then move on to the next one. All that information the grader collected is then lost forever. We had it for a second, and it was very valuable information, but then we forgot it. All we are left with is one bit of information, the grade. With this system we keep this information. It has cost us money to collect it, it has value, and we can not afford just to let it evaporate.

Objective Quantitative Hide Grading



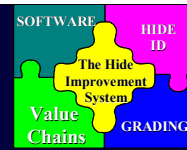
Alternatively from these individual scores
an
overall score
out of 100 can be calculated.

This can be used to assess hide quality.
eg average Australian scores

Queensland	55 - 60
New South Wales	72 - 74
Victoria	76 - 78

From this data you have collected and stored, you can also calculate a score out of 100 for hides. We were able over a period of time to show the difference between Queensland, New South Wales and Victorian hides. We always knew they were different, but this system allowed us to quantify it.

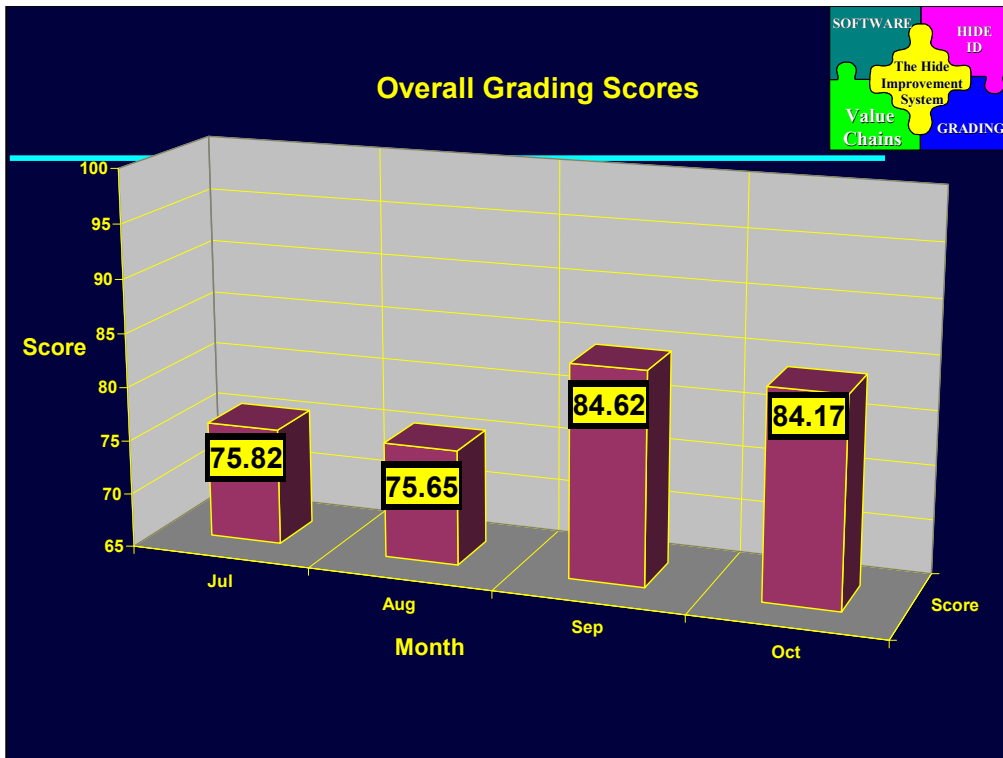
Objective Quantitative Hide Grading



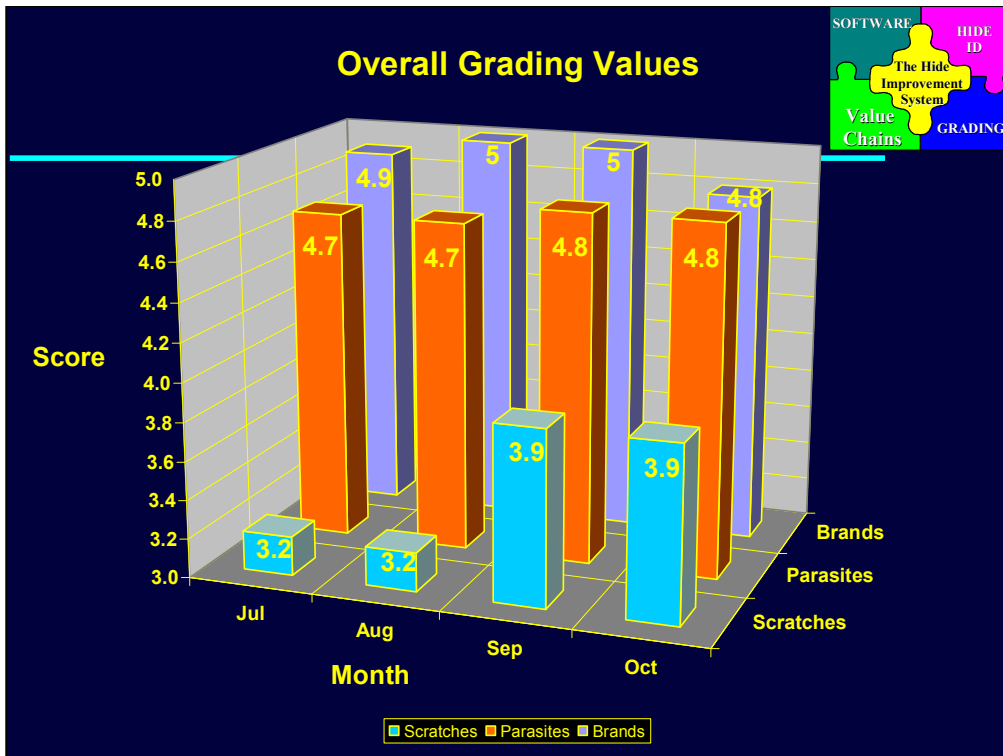
Some Examples of real data

**Taken from one alliance over 4
months of 19XX**

I have some real data from one of the supply chains we developed.

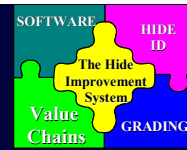


For the first two months, the scores were dramatically lower than for the last two months. Having collected and recorded the data, we were able to investigate this in more detail.



We could see that while the brands and parasite damage had not changed significantly, the scratches were the main reason for the lower grades. Once again, as we still had the grading data, we were able to dig deeper to investigate further.

The Worst



◆ **Supplier 1 31/8 Lot 4008 24 hides**

Brands	Scratches	Parasites	Score
4.8	1.9	4.9	59.9

◆ **Supplier 2 1/8 Lot 5019 37 hides**

Brands	Scratches	Parasites	Score
5.0	2.2	4.5	62.3

◆ **Supplier 3 25/8 Lot 1012 25 hides**

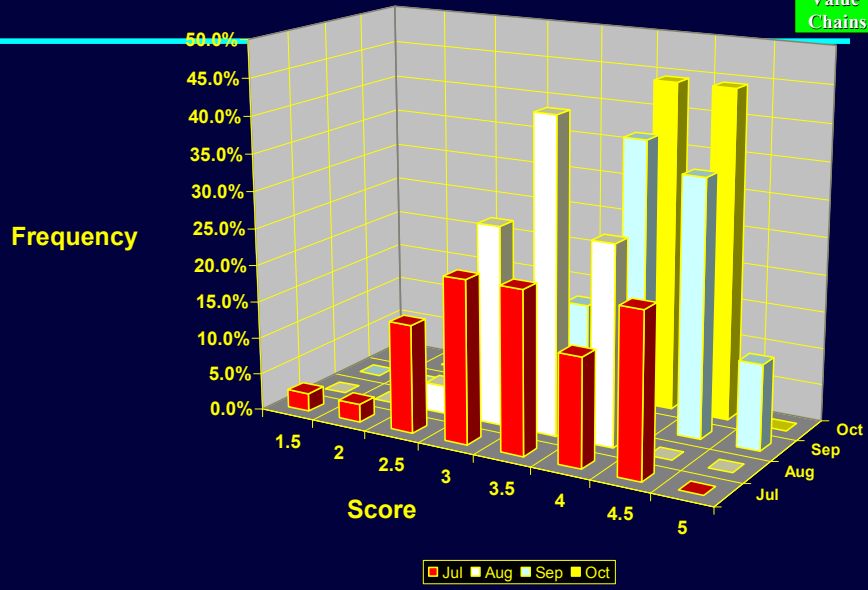
Brands	Scratches	Parasites	Score
4.9	2.6	4.2	64.2

When we separated out individual suppliers, we found that some of them were the cause of the problem. Supplier 1 delivered a lot on the 31st August of 24 hides, which were very badly damaged, with heavy open scratches. Without this system in place, these 24 hides would just be spread throughout several thousand other hides and would not have attracted much attention, but when you can see they all came from one supplier you have a very powerful tool to do something about it.

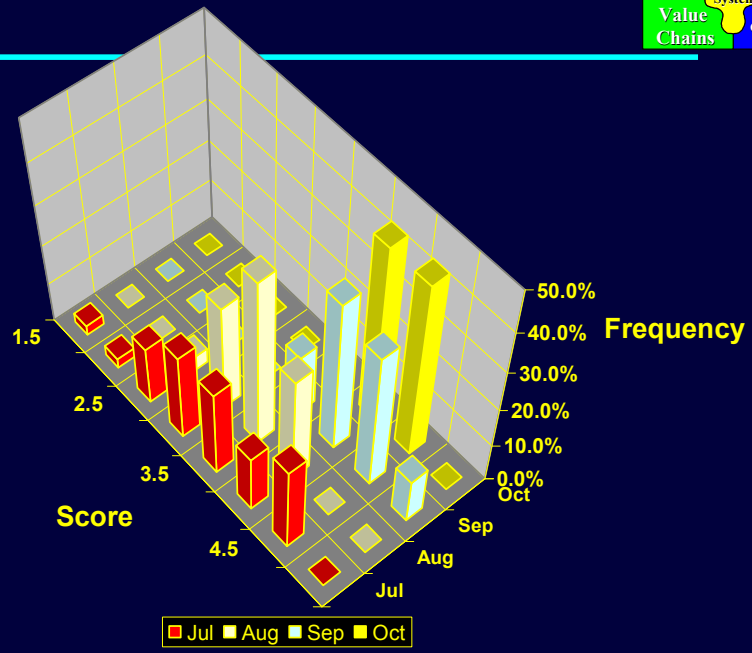
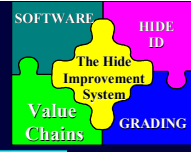
Several other individual suppliers were also delivering woeful quality hides.

Analysis of Scratches

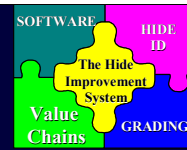
SOFTWARE
HIDE ID
The Hide Improvement System
Value Chains
GRADING



Analysis of Scratches



The Best



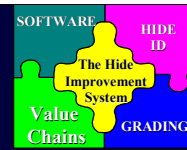
Feedlot 1 11 Deliveries 2/7/XX - 16/9/XX

Brands	Scratches	Parasites	Score
5.0	3.5	4.7	79.5
5.0	4.5	5.0	93.2
5.0	4.3	4.8	94.5
5.0	3.7	4.9	82.7
5.0	3.8	4.9	84.0
5.0	3.7	4.8	81.7
5.0	4.0	4.9	86.7
5.0	4.3	5.0	91.4
5.0	3.8	4.9	84.7
5.0	4.7	5.0	95.8
5.0	4.9	4.4	95.1

On the other hand we saw suppliers, for example one feedlot, that delivered nearly perfect hides on a regular basis. Over 11 deliveries for the four months, they just kept coming, beautiful hides.

You can easily imagine which suppliers we decided to abandon, and which ones we decided to target to make sure we got all their hides.

Others



Feedlot 2 30/09/XX

Brands	Scratches	Parasites	Score
5.0	4.8	5.0	96.9

Saleyard No 1 08/10/XX

Brands	Scratches	Parasites	Score
5.0	3.4	4.8	78.6

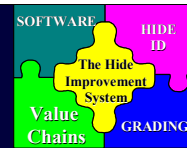
Saleyard No 2 09/10/XX

Brands	Scratches	Parasites	Score
4.9	3.7	5.0	83.26

Feedlot 3 01/10/XX

Brands	Scratches	Parasites	Score
4.7	3.7	4.8	81.4

Objective Quantitative Hide Grading



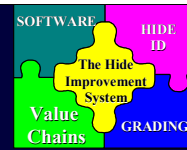
Cost of Errors in Grading		Results
Type A Error	Low Grades going into High Grades Usually very visible Usually discovered	Unusable leather wasted Inefficient further processing: higher cutting costs and wastes Disputes and returns Increased inventories Customer's production scheduling disrupted: Dissatisfied Customers
Type B Error	Scarce High Grades going into plentiful Low Grades Usually invisible Rarely discovered (Rarely disclosed if discovered)	Wasted good quality selections Reduced value High margin orders not filled Customer's production scheduling disrupted: Dissatisfied Customers

My experience over 15 years has convinced me that this objective grading always delivers more accurate grading than the traditional subjective grading which is practised in the industry. Inaccurate grading is very costly to the whole industry. I will talk soon about value chains. Bad grading effects everyone in the value chain, making it more inefficient and wasting valuable resources.

There are two types of errors. Type A puts low grades up into high grades. It is very visible to the customer, and will usually be discovered. The table shows the problems it causes, ending in dissatisfied customers.

Type B errors put the scarce and valuable high grades onto lower grades. This is not usually visible, and customers will never mention it. But the effects are equally, if not more dramatic on the overall value chain. It is a terrible waste of resources, and indirectly but unavoidably leads to dissatisfied customers.

Objective Quantitative Hide Grading

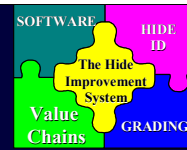


- ◆ Take the guesswork out of grading - every piece graded accurately
- ◆ Each piece graded into its **Optimum** use, that is, its **most valuable** use
- ◆ Every piece can be individually identified and all data for each piece recorded separately
- ◆ Selection of the grade done automatically, objectively, based on the data recorded
- ◆ Mine this data to get information and knowledge
- ◆ Produce independently verifiable results
- ◆ Use the Graders' greatest asset; their Vision system
- ◆ Use the Computers' greatest asset; their data collection and manipulation ability

This grading system can transform the ancient art of grading.

It uses the human vision system, the best yet developed, combined with the computers data manipulation ability. The results are objectively verifiable. You can send the grading scores and definitions to someone in China to grade a wet blue hide, and they will get the same result as you will.

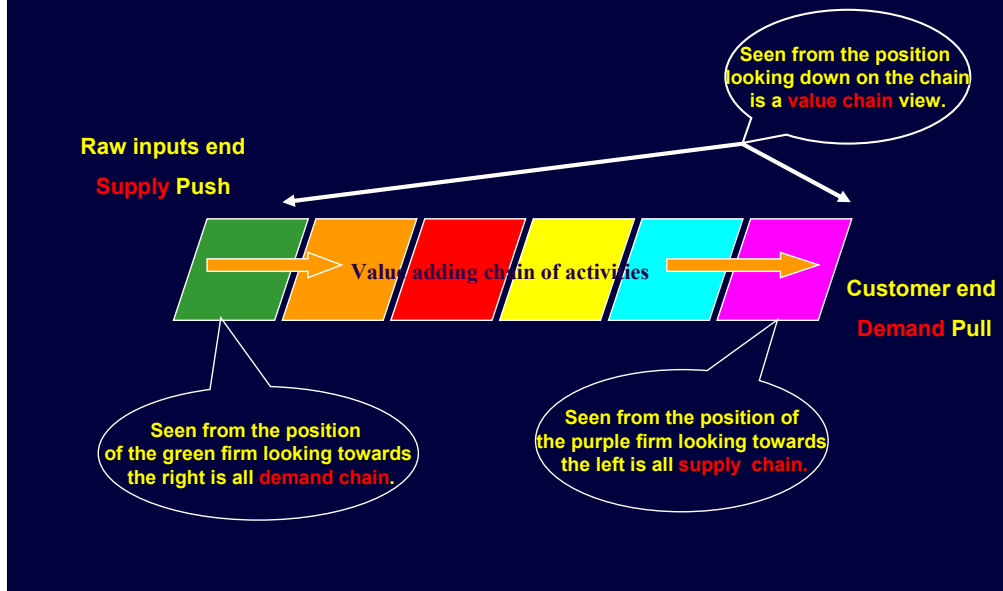
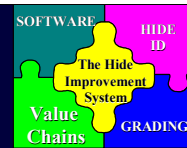
Objective Quantitative Hide Grading



- ◆ More precise selection of a wider range of grades. Tailor made grades for specific customers or for specific orders
- ◆ Changing the grading outcomes without altering the way the graders are doing their assessment.
- ◆ Eliminate the need for Graders to feel pressured. They keep collecting the information in the same way all the time. Adjustments to grading outcomes can be manipulated in the office by the management adjusting computer settings.
- ◆ More accurate allocation to a grade
- ◆ Fewer pieces upgraded wrongly
- ◆ Fewer pieces downgraded wrongly
- ◆ Accurate counts
- ◆ Setting up Quality Assurance Procedures to check graders becomes easy and quantifiable.

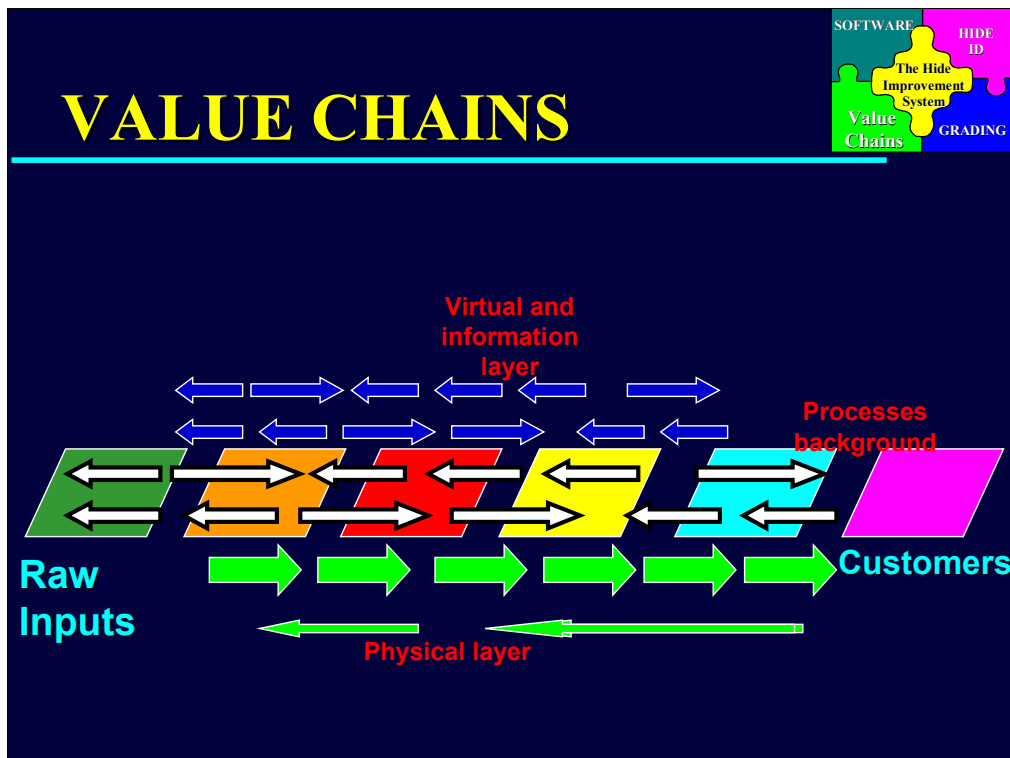
Part of the system is a regular QA exercise to see the graders are all interpreting the scores the same way. This is an objective check on the grading. We all know graders 'drift', but this will bring them back in line. We all know the effect on graders of the tannery manager going to them and saying "we are not getting enough A grades, try harder!" This completely confuses graders and causes chaos. In this objective quantitative system, the manager just has to tweak the numbers in the computer, and allow the graders to continue unchanged.

VALUE CHAINS



To implement the type of information flow you need for your exercise, it is essential that you have a number of firms working together collaboratively. This can happen through value chains. We needed to develop value chains to implement the flow of information.

If you are a cattle rancher, down at one end of the chain, you are looking at your demand chain. A furniture or shoe maker at the other end looking back down the tunnel is looking at their supply chain. If you stand back and take a helicopter view of the chain, you can see it as a series of value adding activities, a Value Chain.



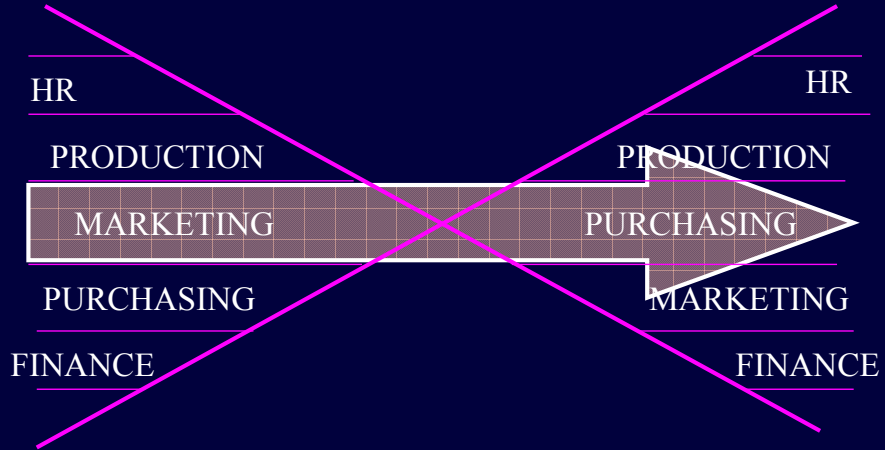
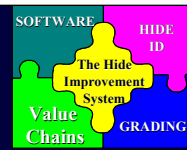
There are three layers to a value chain. The Physical Layer, where the logistics takes place, physical movements of goods going up and possible down the chain.

Then there is the Process Background layer, with all the processes going on – breeding cattle, slaughter, fleshing tanning sammying finishing clicking lasting sewing etc.

The focus on improved efficiency and big gains is in the virtual or information layer. When firms work in the traditional manner, with one firm dealing with another, there is no information flow up and down the chain, only from firm to firm. There is often information available at one end, which is very valuable to a firm at the other end, but no way of getting it there.

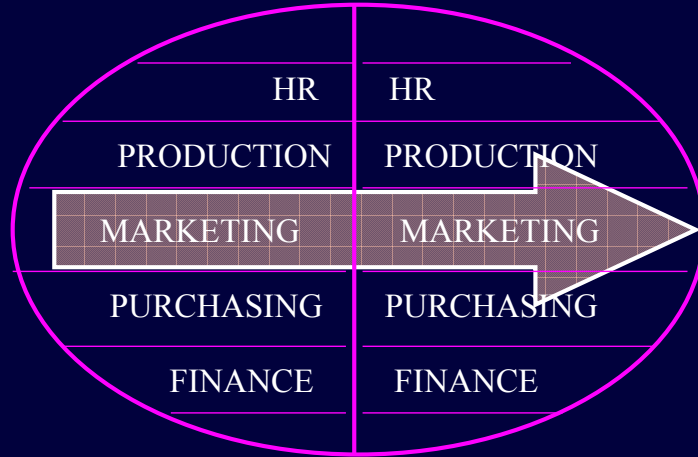
In your case I understand the end users want information about where an animal was reared. It is only through working in a value chain mode that you can get that information to the other end of the chain.

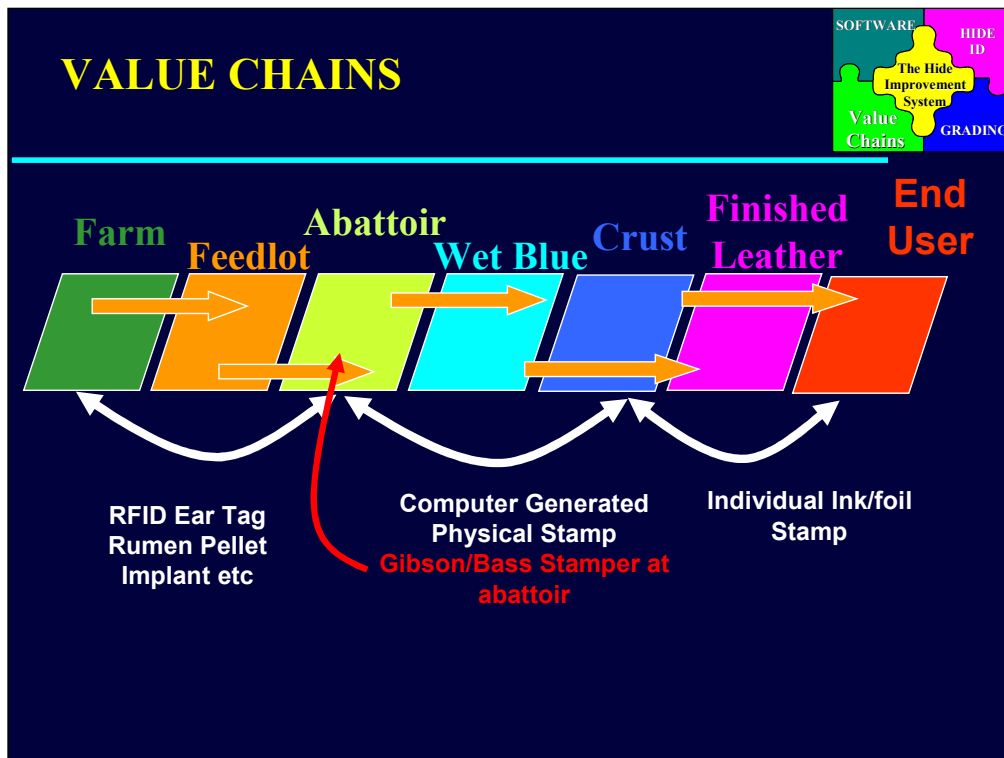
Inter-firm Relationships - Now



Inter-firm Relationships

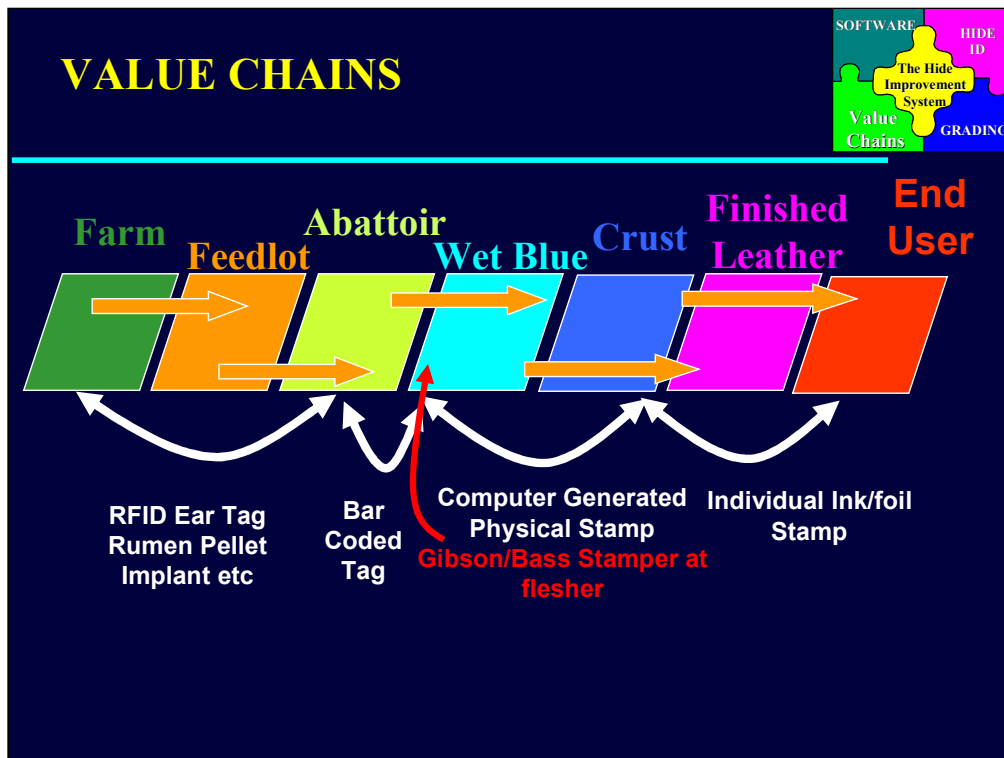
- Next



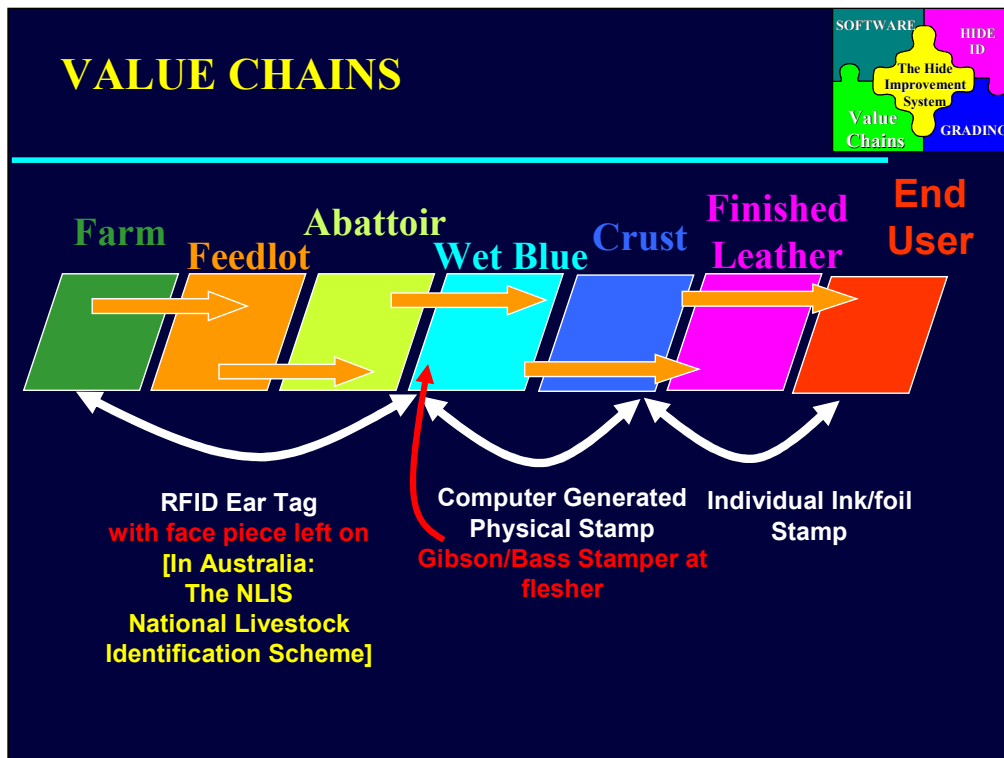


I will propose a couple of solutions which you might consider. Firstly the model that has an eartag or other form of identification up to the abattoir. At the abattoir, a physical mark is put on the hide by the Gibson Bass Stamper, which relates to the source of that hide. This stamp carries through to crust, where other methods of ID which do not have to survive the fleshing, tanning and splitting process can be used, for example an ink stamp such as GER have developed.

It is a very challenging task to find an ID that will survive the physical and chemical processes which a hide goes through from the abattoir to the crust stage.

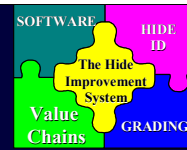


A second model uses a bar coded tag to go from the abattoir to the tannery, and it is then read, and a stamp applied which links to it, at or before fleshing. We could not find a tag which had an acceptable survival rate after fleshing.



A third model, which I have used in Australia, is applicable when the abattoir leaves the face piece on, with the electronic ear tag attached, as we have in our NLIS, and this is read at the tannery and linked with the stamp which is applied at induction to the tannery.

HIDE VALUE CHAIN



Stamper at Abattoir

More stampers

Simplest process

Best retrieval rate

Stamper at Tannery

Fewer stampers

More complex

Lower retrieval rate

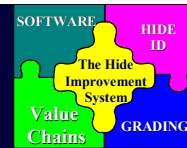
With the first model, the stamper at the abattoir, you need more stampers, but it is the simplest process, with the best retrieval rate.

With the stamper at the tannery, you need fewer stampers, but there is one more opportunity for error, and while it is possible, it is a much more complex operation.

The principle is that you put the simplest ID you can on the hide, with the minimum information required, and pass that along the physical layer of the value chain. You then link it in your database to the multiple and complex bits of information related to that hide, and transfer that electronically through the virtual layer of the value chain.

For example Lot 24 from day 02 from abattoir No 7 could be a number 70224 on a hide. This could be linked in the database to all the other information relating to that lot, including the supplier.

The Software: Tannery Management System



The **Software** (now called the **TMS**) has been installed in **10** of the **12** Australian Wet Blue Plants, one dedicated fleshing plant, and two overseas tanneries:

In total **13 sites** over 15 years

It is probably the most **powerful, flexible, reliable** grading/inventory/process management **tannery software** available.

It is in its **13th** Version

To date probably **60 million** hides have been graded using the Software.

It is now grading around **5 - 6 million** hides per year

To achieve this we needed to develop the information layer of the value chain. And what started out as software to allow collection and transfer of Objective Quantitative grading data used to calculate a grade, very soon became an enormously powerful piece of tannery management software. As we developed it and took it to each new tannery, they added their own special requirements. As we were a Government funded program, we then spread those changes back to all the users. Over ten years then we were able to develop a piece of software of incredible flexibility, able to cope with anything a tannery could throw up. It would be almost impossible to develop software to the level of flexibility, sophistication and reliability that this has in a commercial environment.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



The Gibson Bass Stamper gives you

- ◆ **.....permanent identification,**
- ◆ **....with a computer generated Stamp....**
- ◆ **...in the form of numbers letters or codes.**
- ◆ **The stamper is completely safe,....**
- ◆ **...compact, fast, reliable...**
- ◆ **It stamps green hides, brine cures, pickles, wet blue or finished leather.**

The Gibson Bass Stamper gives you

.....permanent identification,

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HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



The Original
1992-2001



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

This was the original stamper we manufactured. We made about 30 of these and installed them in over 20 abattoirs, and learnt a lot of lessons about marking hides in abattoirs, and on identification of hides in general. Once again, to do this development in a commercial environment would be prohibitively expensive.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

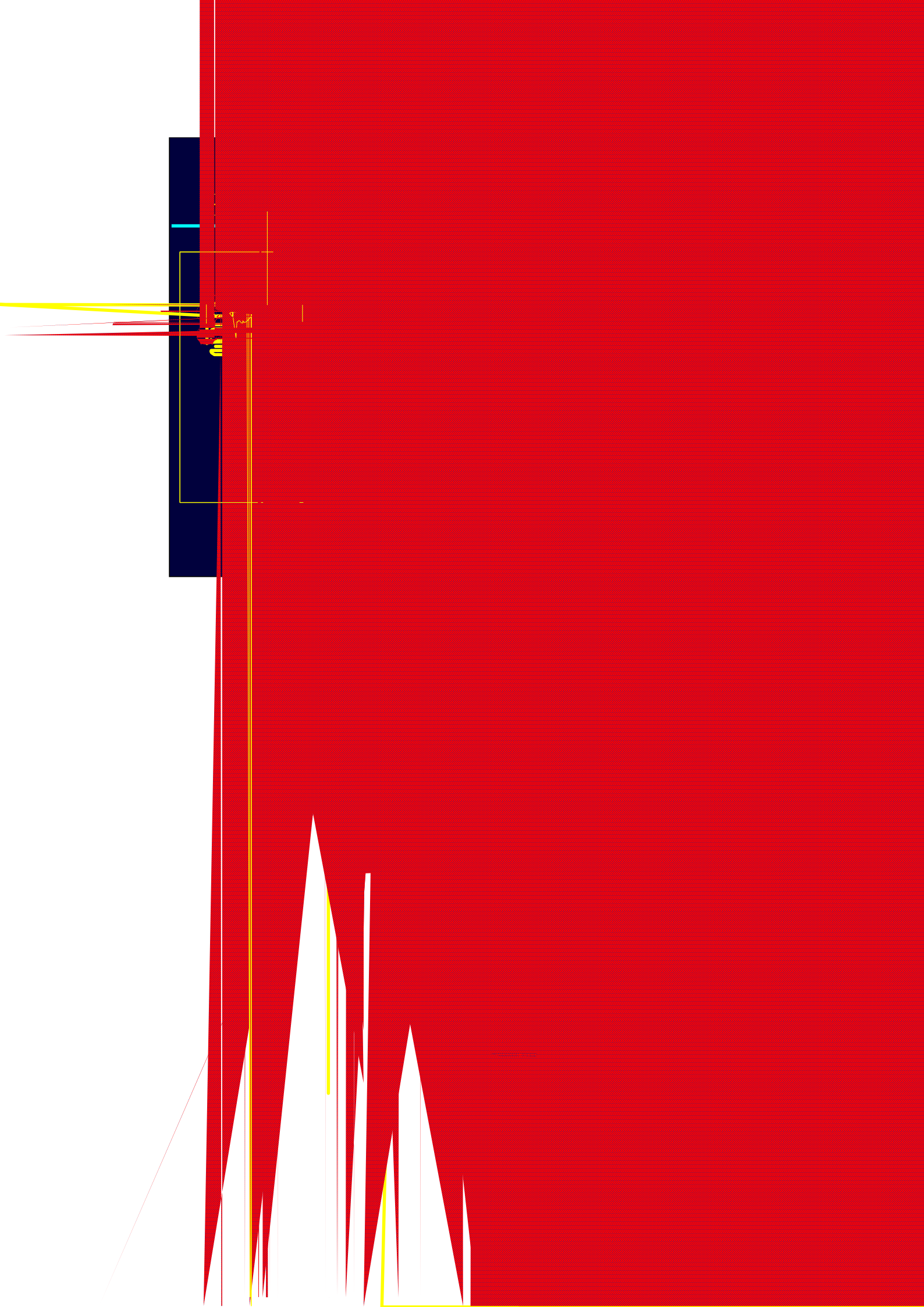
When the Government program finished in 2000, my colleague Richard Bass and I set out to make a stamper that could meet all the requirements I showed you in the first slide, and this is it, the Gibson Bass Stamper. This is a five digit stamper (stamps a five digit number or code). It has a stainless steel guard into which the hide is placed. Once the trigger on the left hand side is pressed it goes through its cycle automatically.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification



HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

The stamper is on a hide chain in Sweden. You can see the hand of the operator which hits the trigger, and the cutters are fired through the hide.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

In this tannery the hides were fed to the stamper operator on a table and he stamped the hides at a rate up to 600 per hour. This was a seven digit stamper.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

You can see the hydraulic pump, with a very powerful motor to drive the cutters right through. There is also the control box, which contains the HMI. Inside is the PLC, we use only Allen Bradley gear, which controls the stamping. It can communicate with you local computer system by ethernet or wireless.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual Hide Identification

To give an idea of the flexibility of the software that controls the stamper, (I write the software in consultation with the client) this tannery wanted two systems. It was a toll tannery, and it wanted one mode to simply identify the operator whose hides it was tanning. This mode was indicated by a code of three parallel horizontal lines, followed by the operator number. The screen is visible to the operator (and the supervisor). It shows this hide belonged to CMG Innisfail abattoir.

They had a second mode which could be selected through the screen, doing individual stamps, which were used for a couple of abattoirs which had the Gibson Bass stamper installed.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual Hide Identification

This tannery had a seven digit stamper which also had several modes depending on the source of the hides. This was a year/day mode, where it stamped a year number, a day number, and a body number for that day.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

This stamper was set to stamp a consecutive indexing number. Each stamp indexed by one.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



Clear
Permanent
Individual
Hide
identification

The Id is often read at the input to the sammyer where it is visible, or it can be read at the exit from the sammyer.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper

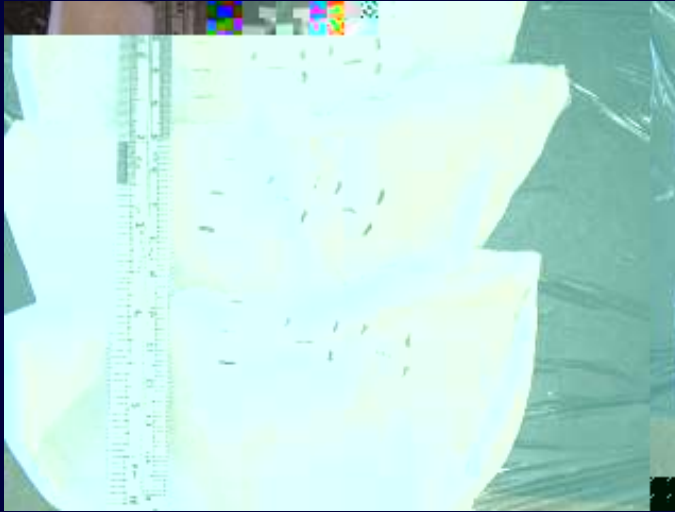


- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

Even with very heavy tick marks, the number is clearly visible.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

Is it robust? Look at the cleaning instructions, just hose it down.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

This is what the cutters look like. Nothing will stop them.

HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
Stamper



- ◆ Clear
- ◆ Permanent
- ◆ Individual
Hide
Identification

Is it easy to use? What could be easier than this.

The Ideal Hide Identification

	Gibson/Bass Stamper
<input type="checkbox"/> Unique code on each hide	✓
<input type="checkbox"/> Human Readable / Human Decodable	✓
<input type="checkbox"/> Hygienic, safe, for application on a kill floor	✓
<input type="checkbox"/> Readable on grain and drop	✓
<input type="checkbox"/> Software driven code	✓
<input type="checkbox"/> Code can be externally generated	✓
<input type="checkbox"/> Selectable No of digits eg 4, 5, 6, 7	✓
<input type="checkbox"/> Applied while the hide is still on the animal	✓
<input type="checkbox"/> Lasts through to finished leather	✓
<input type="checkbox"/> 100% Retrieval	99+%
<input type="checkbox"/> Readable with hair on and hair off	Partial
<input type="checkbox"/> Machine Readable	Possible

Coming back to my ideal hide identification.

Yes Yes Yes yes yes yes yes.

No one can claim 100% retrieval, however this system gets very close to it, with very few misses. The two areas where supervision is needed is the feeding in of the hide to the jaws, which is simple but can be done badly, and that the number is not trimmed off at further trimming stages.

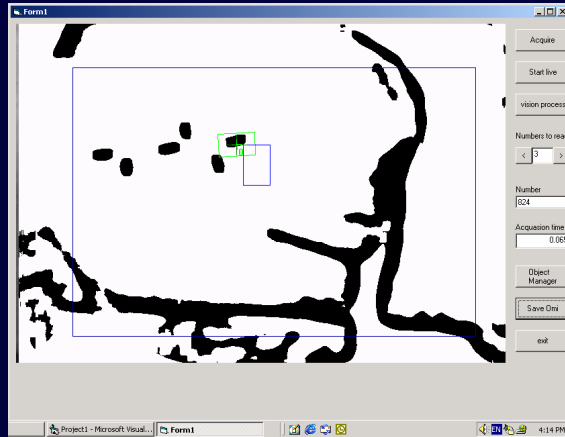
If you need to read the number while the hair is on on a regular basis, we recommend a bar coded tag in addition to the stamp. If you only need to check on an irregular basis, shaving the hair off with a knife will disclose the number. The stamp is always put in the same place on the hide to minimise errors.

It is possible to read the number electronically, however it has not yet been developed into a practical tannery application. I would hope that in the course of this exercise, I might find a cooperative tannery that would like to trial installation of the vision system in the harsh tannery environment.

The Ideal Hide Identification

Gibson/Bass
Stamper
Possible

Machine Readable

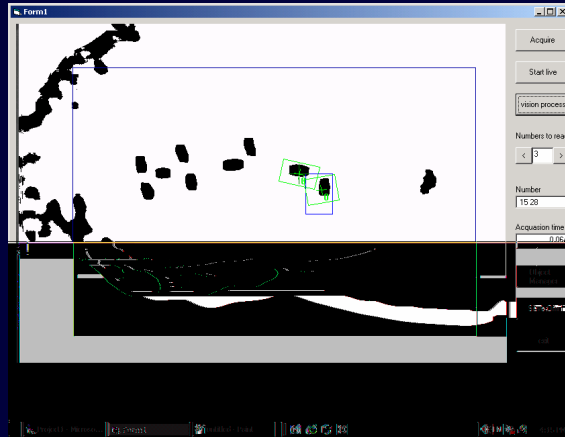


You can see that this image has picked out what is the stamper mark from what is other parts of the hide, and has in .065 of a second found correctly three numbers, 824. The following slides are all correct reads, and all in a very short space of time. These reads were done on a desk in an office, but could be translated into a tannery environment if robust equipment was purpose designed.

The Ideal Hide Identification

Gibson/Bass
Stamper
Possible

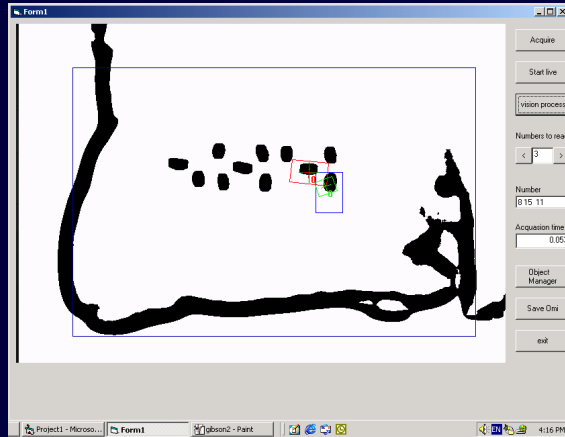
Machine Readable



The Ideal Hide Identification

Gibson/Bass
Stamper
Possible

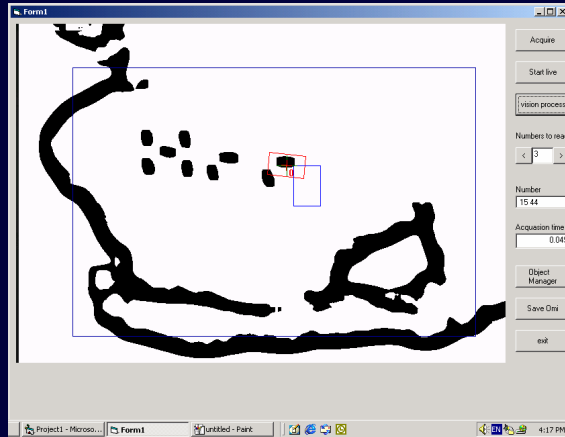
Machine Readable



The Ideal Hide Identification

Gibson/Bass
Stamper
Possible

Machine Readable



HIDE IDENTIFICATION

The
Gibson-
Bass
Hide
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SUMMARY

The Gibson Bass Stamper gives you **“Clear Permanent Hide Identification”**

The TMS gives you **“End to End Tracking and Control”**
Quantitative Objective Grading gives you **“reduced waste, added certainty, improved customer value”**

Working collaboratively in a value chain situation gives **“efficiency, leanness, reduction of waste and information flow”**

SUMMARY

The
Gibson-
Bass
Hide
Stamper



Using all four tools together can take you to a new level of
traceability with data integrity
vastly improved efficiency and reduced waste
a new level of Customer satisfaction and service
a more sustainable business
and a more sustainable environment

Using all four tools together can take you to a new level of traceability with
data integrity
vastly improved efficiency and reduced waste
a new level of Customer satisfaction and service
a more sustainable business
and a more sustainable environment

END

**The
Gibson-
Bass
Hide
Stamper**



Joe Gibson

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