My family own a boat and enjoy waterskiing in the summer. But in the winter the skis are either leaned against the wall or lying on the floor of the garage. This can be a huge problem. My Dad complains about them getting damaged by leaning them against the wall and then the skis getting knocked over. But my Mum says it’s a nuisance with them lying on the floor of the garage.

I aim to make a water ski holder to solve the problem of having water skis getting damaged. It will hold the skis on the wall using Velcro and a big hook. I want it also to be able to hold the weight of a single ski, of any size – junior, intermediate, and adult.

I have also asked Hamish and Justine Brown (other boat owners) about this, they put their skis in their boat because they have nowhere to put them in their garage.

I have asked Keven Koch as well, he said it would be a good idea to have a way to hold them using little space, and not getting the skis damaged.

1) Be able to be adjusted for different ski sizes – junior, intermediate and adult.

2) Be strong enough to hold the weight of a single ski.

3) Be cost effective.

4) Be quick and easy to use.

5) Be available in at least 2 colour choices.

6) Be soft enough material so it doesn’t scratch the skis.

7) Be durable and hard wearing.

I have searched the internet thoroughly for inventions that suit my criteria to see if I have to change my invention.

I found 5 ski holders/racks on the internet. (You can see pictures of these in my Clear File Log Book.)

I have also gone into Matamata Marine to talk to Ken. I asked him whether he had seen anything on the market that suited my criteria or whether he sold anything like that in his store. He sold nothing like it and had only heard of ski racks on the market.

After I visited Ken I went to see the staff at Matamata AG Centre. In their shop they had a ski rack which held skis, not what I’m looking for. I also asked whether they had heard of anything like this on the market and their answer was ‘not really.’

None of the products that I found on the market fitted my criteria. Most of them fitted criteria 2, 4, 6, and 7. Only some of them fitted criteria 1, 3, and 5.

Yes, I should proceed because none of the products on the market fitted all of my criteria meaning my invention will be new!!

Design 1 fitted criteria 1, 3, 4, 5, 6 and 7.

Design 2 fitted criteria 2, 3, 5 and 6.

Design 3 fitted criteria 1, 3, 4, 5, and 6.

Design 4 fitted all of the criteria.

Design 5 fitted criteria 1, 6, and 7.

I’ve decided to choose design 4 because it fitted all of the criteria. Another reason is because it’s simple to use, meaning that anyone could use it.

Also this design is attractive, if more people like the design then I would make more profit from the sales.

1. Be able to be adjusted to suit different ski sizes – it has a Velcro strap that can be adjusted for different ski sizes.

2, Be strong enough to hold the weight of a single ski – has a seat belt strap up the back, (seat belt straps are very strong material.)

3, Be cost effective – The materials are basic so the price would be effective.

4. Be quick and easy to use – would take a very short time to hang a ski.

5. Be available in at least to colour choices – light blue and bright yellow.

6. Be soft enough material so it doesn’t scratch the skis – good material that doesn’t scratch.

7. Be durable and hard wearing – the material I decided to use for this design is durable and hard wearing.

I went to see Kathryn Thurston, Kevin Koch, Gordon Wood, and Hamish and Justine Brown, (all water ski owners) to trial my prototype. I also created a questionnaire to get them to fill out.

You can see the completed questionnaires in my Clear File Log Book.

First I took my prototype to Kathryn Thurston and she thought it would be a very good idea to have a ski holder, She said it would keep other garage space free, and keep the water skis from getting damaged. Kathryn Thurston also thought a good price for the ski holder would be $30 for a single and $50 for two.

Secondly I took my prototype to Kevin Koch, and he thought it also would be a good idea to have a ski holder. His reason was because it would keep skis from getting damaged. He thought a product like my prototype would sell for $25 - $30. Some feedback he gave me was making sure the strap could still fit around a covered ski.

After I saw Kevin Koch I went to see Gordon Wood. He thought it was a good invention for those people who have a need. He also said it looks simple and easy and should last for years!! I asked what price he thought it would sell for and Gordon Wood said $25.

My last visit was to Hamish and Justine Brown. They also agreed that it looked like an excellent and useful ski holder. Their reason for this was because it keeps everything tidy – especially when you want to use the boat for another reason and are not skiing. The price they suggested for this prototype was $30. Some feedback they said was you could add a second binding on the back to enable a second ski to be held with it.

Modifications for final product:

* Make the strap 2cm wider on each side.
* Ask for it to be made in different colours.
* Extra reinforcing stitching on the Velcro, to make it even stronger.
* I inquired about wider Velcro.

My prototype is designed to hold one single water ski. You place it open on the ground, with the straps open outwards. Then you lay the water ski down the centre of the prototype and fold over the Velcro straps. After that you screw a hook into a stud in the wall and then place the hole in the prototype over the hook. It has two holes to allow room for different length skis.

I have emailed 3 boating shops/companies, Burns Co Marine, Rollos Marine and Matamata Marine. (You can see my emails in my clear file log book.)

Ken Watkinson (from Matamata Marine) replied to my email about the marketing of my product. He stated in his reply, ‘If you were to market them through a retail outlet there would be a dealer margin and GST to consider, and the production run would need to be of a sufficient size to keep the unit cost down. He also suggested that maybe Trade-Me might be a good option to start with where you could sell your product worldwide and not have the cost of expensive brochures or allowing for dealer margin.

In my questionnaire/survey I had a question that said ‘What price do you think a product like this would sell for?’

***Kathryn Thurston said:*** $30 for single and $50 for two.

***Hamish Brown said:*** $30 each

***Gordon Wood said:*** $25 each

***Kevin Koch said:*** $25 - $30 each

My Up-ski Daisy will cost $28.00 incl GST, and to encourage the buyers it will cost $50.00 incl GST for a pair. This is the cost I have decided on after calculating my expenses and also evaluating the responses of my public feedback on costing. I have taken into account the cost of materials for the ski holder, labour costs, hooks, packaging and advertising. I have then added a mark up of $6.00 to get my GST exclusive figure. GST of 15% is then added.

**Calculations:**

|  |  |
| --- | --- |
| Materials  Labour  Hook  Packaging and Advertising  Mark Up  Total Excluding GST  GST (15%)  Total Including GST | $ 5.00  10.00  1.70  1.65  6.00  24.35  3.65  $28.00 |
|  | |

If I was producing a large quantity of Up-ski Daisies the cost of materials would be reduced because I could buy the materials in bulk.

In an effort to keep environmental impact as little as possible I have decided on a simple thin plastic bag for packaging my product. I have put my logo sticker on the front of the packet. Each packet contains an Up-ski Daisy Ski Holder, a hook, and simple instructions for use.

A patent is a set of exclusive rights granted by a government to an inventor for a limited period of time in exchange for the public disclosure of an invention.

If I was to start selling my product I would want to look at getting it patented.

There are three options for selling my product. I could sell my product/patent to an upholsterer or marketing company, sell it myself, or commission the product so I (the inventor) get a percentage of the sales. The first option is not suitable because I wouldn’t get any of the money from the sales of the product I have invented. The third option isn’t a good one either because by paying commission or dealer margin my profit from sales would be reduced. Therefore I would choose the second option because although I would have all the expenses of making the product, I would also get all of the profits.

I have designed business cards and pamphlets. (These can be found around my presentation.)

If I was to sell my product I could use the business cards and pamphlets as advertising, to present my product in places like boating shops or perhaps events like the Boating & Leisure Show.



In the futurewith my prototype I would like to research the use of recycled seatbelt straps. This would have some affect on the cost and would be excellent for the environment by reusing straps that are still in excellent condition but have come out of damaged cars.