



## Identification and Exploration of the Need

It's a mid-January night, right on bed time, you jump into bed with the fan on full speed and the air conditioning on snow setting trying to cool yourself down enough to get to sleep, and it's not working! The day has super heated your mattress and it is radiating the heat back into your body fighting the cooling breeze from the fan and air conditioning. If only there was a device that could be fitted to cool the bed to retard this heat and help the fan cool you down. It should also have the ability to reverse that action and generate heat in the colder months without effort and with the flick of a switch.

### **Design Brief:**

To design, construct and evaluate a device to cool and/or heat bedding. The device should be comfortable to sleep in/on and be economically viable.

### **Need Identified:**

For years Australians have been restlessly sleeping and not getting the full prescribed number of hours. These in most cases are temperature related sleeping problems. Either the person is too hot in summer or too cold in winter. This is also a rising problem due to the effects of the recent global temperature changes effecting the normal seasons and producing irregular weather conditions. There is an ever increasing demand by the general public that I surveyed and they believe it is time to design and market a form of cooling and/or heating device that can be added to bedding so people can catch up on their many missed hours of sleep.

People who I surveyed asking if they would be interested in a device that could heat and cool bedding to improve their quality of sleep.		
Yes	No	Indifferent
72%	24%	4%



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