

# [Smart backpack](https://assignbuster.com/smart-backpack/)

Smart Back Bag Need/Problem Identified Cell phones and tablets have always gone hand in hand with power and without power their use is always limited. This has created a need among consumers to find a black bag where they can freely carry their chargers without finding it difficult to move around while carrying them. This is because they have limited battery capacity and without deportable chargers it is useless carrying them around and this takes away their purpose and power. In light of this, smart back bag has made it possible for consumers in different regions to continually use their cell phones and tablets as it provides them with a USB cable which they can freely and easily use to charge the gadgets while moving around whatever situations or places they are in at any time. The bag is perpetually designed to safely hold the gadgets since it has a limited capacity and thereby there are close to zero chances of moving parts. Moreover, the bag is very durable and has a potential of lasting four times than other ordinary back bags, hence giving individuals value and service for the money they use in the purchase.
Function/Performance Provided
The smart back bag will be efficient for most of its users as they will have the first experience of using a fully modified back bag of the century. The bag will act as a source of power for mobile and tablet gadgets as it will have a battery that is installed in it to collect, preserve and produce power or electricity when needed. The bag will be able to function effectively during sunny days and average when there is no sun or partial sunlight. However, functioning will be less or none at all in winter conditions.
Technology Related
The solar cell will be used in the smart black bag to absorb the suns energy and later convert it to power that can be used by different sorts of machines. Therefore the solar cell and solar technology will be used in the production and the invention of the new smart back bag. The bag will be fitted with concentrated solar power systems which will work to absorb and direct the suns energy and generate it into heat before passing it over to be stored in the battery of the smart back bag. Secondly, the solar systems in the smart back bag will also be fitted with transpired solar collectors and solar water heating systems which will function to produce heat to be used as power for recharging cell phones and tablets.
The cell phones and tablets will be either charged directly by the solar systems installed in the bag or via the battery which has been charged by the solar energy, anyway is still effective. This will reduce the costs incurred by gadget users in buying new batteries for the tablets or cell phones when travelling to areas where there is no power source, thus reducing if not eradicating unnecessary inconveniences caused by sudden or distant travels when the owner of the phone or tablet has not had time to charge their electronics (International Symposium on Environmentally Conscious Design and Inverse Manufacturing, & Umeda, 2012)..
Reference
International Symposium on Environmentally Conscious Design and Inverse Manufacturing, & Umeda, Y. (2012). Design for innovative value towards a sustainable society: Proceedings of EcoDesign 2011: 7th International Symposium on Environmentally Conscious Design and Inverse Manufacturing. Dordrecht: Springer.