Faculty of engineering

Solar Power Bank

Physics applications project

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Section: 6

ENG/ Mahmoud Mostafa

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Task Sheet

Member	Tasks Participated in
Amir Anwar	Merging & formatting - market research
Alhusseain Shalaby	Revisor
Akram Hany	market research - literature review (theoretical)
Amir Ashraf	literature review (methodology)
Ekwan Ehab	market research – literature review (theoretical)
Albashir Altayeb	
Enji Ashraf	Background (research) – Sustainability
Amira Hisham	Motivation – Sustainability
Omnia Mostafa	literature review (historical)

Literature review

Historical Review

Methodological Review

Theoretical Review

Market Research and customer feedback

Background

Solar energy has evolved as a major alternative source of energy. Solar energy is increasingly being utilized as source of energy for street lighting, automobiles, house appliances and others. In recent times, solar power banks are gaining popularity in the consumer market, with the rise in use of electronic gadgets. Solar power banks serve as an energy storage device, which can be utilized when required to charge any of the USB-charged devices.

Solar power banks require sunlight to charge, making it reliable in circumstances where electrical supply or charger is not available. Most of the solar power banks available today can be charged alternatively via computer using USB. Considering solar as an environmentally friendly technology, demand for solar power banks is expected to escalate in the coming years. (1)

The key companies operating in solar power bank market include Anker., Advantage Computers, LG Chem, China BAK Battery, Inc., Mophie Inc., Microsoft Corporation, Panasonic Corporation, OnePlus, Sony Corporation, Samsung SDI Co., UNU ELECTRONICS INC., Xiaomi Technology Co., and Shenzhen Topband Co.

In this report we will try represent a comprehensive assessment of the market trying to identify the thought process of the target costumer, what matters more to them the price or the quality, what extra features would they find more appealing and what is the expected price range.

Strengths:	Weaknesses:
• Sustainability • Competitive price range with respect to capacity	• Bad aesthetics
Opportunities:	**Threats:**
• The need for renewable portable power sources in increasing	• New companies face a hard time gaining a market share against the established competitive ones.

Participants and Methodology
Key Findings
Next Steps and Recommendations

A Review on Project compliance with national standards for environmental sustainability

References

1. **Solar Power Bank Market - Global Industry Analysis, Size, Share, Growth, Trends and Forecast.** ***transparencymarketresearch.*** **[Online] https://www.transparencymarketresearch.com/solar-power-bank-market.html.**