Assignment 2

SWOT & PESTEL Analysis

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**SWOT Analysis**

**Strengths**

* **AI Technology**

Safe Sleep Security makes use of efficient AI Algorisms for the implementation for person detection, boundary intrusion and time scheduler.

* **Cost Effective**

Safe Security provides High End security features in an affordable price, making it accessible to a huge audience

* **Customizable Features**

Time Scheduler and Boundary Marking are the customizable features of Safe Sleep. In the Time Scheduler feature, the user can set time frames for any number of events. In the boundary marking feature, the user can create a custom boundary and if any intruder is detected within the boundary, the user will be alerted.

* **Real Time Camera Footage**

Users can view the live coverage of their camera’s at anytime and anyplace.

* **Reliable Database**

Safe Sleep stores the user’s data in Firebase. Firebase is a reliable database as it is a product of Google.

**Weakness**

* **Dependence on Internet**

The user needs to have a stable internet connection to access all the features of safe sleep security. The absence of internet could cause the application to not function properly.

* **Camera’s Functionality**

The surveillance camera is an essential part of Safe Sleep’s Security System, and it should always remain functional, so that the user can make use of the features like intelligent person detection, virtual boundary creation, time scheduler, live coverage.

* **Firebase Dependence**

All of user’s essential data like their login credentials, virtual boundary’s coordinates, facial data and others are stored in the Database of Firebase. So, Firebase needs to remain functional as our security system is completely dependent on it.

* **Limited Market Reach**

Safe Sleep’s main customers will be Houseowners, small scale businesses and property managers.

**Opportunities**

* **Expand Target Audience**

Safe Sleep will expand their audience by targeting educational institutes and non-profit organizations as their requirements of security and cost could be matched by safe sleep security.

* **Partnerships**

Partnerships will be made with Surveillance camera companies and real estate companies to improve the distribution of security cameras and enhance safe sleep’s consumer audience.

* **Continuous Innovation**

Research will be done to create enhanced AI algorisms that will help in improving the accuracy and performance of Safe Sleep’s features.

**Threats**

* **Cyber Security Risks**

Safe Sleep like any other application is vulnerable to data breaches and other hacking activities and these activities could lead to comprise of the user’s data.

* **Advancements in AI**

As AI algorithms are being improved on a regular basis, Safe Sleep will need to be updated frequently or else it would lose its efficiency.

* **Economic instability**

If the inflation rates start to rise, the consumer’s spending patterns will be affected and this will result in less business for Safe Sleep Security

* **Market Competition**

The market is filled with companies providing security solutions that have similar features like Safe Sleep Security. This causes intense competition for Safe Sleep and could restricts its growth.

**PESTEL Analysis**

**Political**

* **Government Regulations**

Ensuring that the organization adheres to its respective government regulations related to surveillance, data privacy, and security standards is primordial. Adaptations in the legal structure or the government policy can influence the building of a Safe Sleep Security System in Pakistan.

* **Political Stability**

In Pakistan, political stability consisting of the atmosphere for business process operations and investments in security technology is the premise of success of any commercial or industrial venture. Nevertheless, uncertainty about government actions or political events that may affect market dynamics and according requirements for regulatory compliance are on the rise.

**Economic**

* **Exchange Rates**

Currency fluctuations might also make a competition unbalanced regarding procurement of imported production components or technology that may impact production costs for Safe Sleep Security in Pakistan. The same may affect the pricing strategy as well.

* **Economic Conditions**

Economic forces as GDP growth, inflation and consumer spending vary to a large degree and therefore are a dominating factor of demand for security solutions. The affordability of the Safe Sleep Security System in relation to the averaged income level may shape the HIV rates and its spread among the Pakistani population.

**Social**

* **Safety Concerns**

The problem of safety, traumatized households and businesses due to the issues of personal and property security, security and crime rate contribute to the increasing demand of advanced security solutions such as Safe Sleep Security System in Pakistan.

* **Cultural Norms**

Along the cultural norms toward surveillance, privacy, and the use of technologies in the development of AI-based security systems stakeholders; the acceptance and use of AI-based surveillance systems in Pakistan is likely to arise from the culture.

**Technological**

* **Technological Infrastructure**

Implementation of latest technical infrastructures that come with internet connection and mobile penetration rates leads to use and actualization of Safe Sleep Security technologies in the Pakistani context.

* **Technological Adoption**

The Fast-growing trend of Artificial intelligence technology and mobile apps adopt among the consumer makes Safe Sleep Security able to market its security products towards tech-savvy consumers which are looking for cutting edge products in Pakistan.

**Environmental**

* **Environmental Impact**

The Environmentally safe Security should measure the environmental impact of its products and operations in Pakistan which includes use of energy, and the electronic waste generated. A common approach for promoting environmental consciousness is constant implementation of eco-friendly processes that will be a driver of brand reputation and consumers' loyalty.

**Legal**

* **Data Privacy Regulations**

Adherence to the Data Protection Law of Pakistan, that is, the Personal Data Protection Act, is necessary to make sure that Safe Sleep Security supports secureness and personal data handling. The users' privacy rights are also preserved.

* **Intellectual Property Protection**

The touchstone for AI safety considerations related to genuine algorithms, software, and other safety technologies used in the Pakistani Sleep Security System is safeguarding intellectual property rights. This is key to preventing unauthorized use or infringement by competitors.