

IMPULSIVE TECH

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Smpl. - Smart Plug

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Overview

According to Wikipedia, **Domotics** is building automation for a home. A home automation system will monitor and/or control home attributes such as lighting, climate, entertainment systems, and appliances. It may also include home security such as access control and alarm systems.

While there are many competing vendors in this space, there are increasing efforts towards open source systems. However, there are issues with the current state of home automation including a lack of standardized security measures and deprecation of older devices without backwards compatibility.

The people behind Impulsive Tech have taken it upon themselves to do something about this lack of backwards compatibility. Basically, What if there was a way with which we could make normal day to day appliances a little “smarter”?

Domain

Consumer electronics has become a major part of the embedded domain as new products come into the market. Creative ideas with higher esthetics are the need of this field. Our product offering, the Wifi based Smart Plug is pretty much a game changing idea in the field with the ability to control and set timers to any AC appliance at home with your mobile device and hence, can be marketed to a very broad audience who are in need of simplifying their daily lives. That clothes iron that you're worried you forgot to turn off? Now you can do it on your phone.

Specifications

1. Customers should be easily able to interface their smart plug installations with the mobile application
2. The UI of the application should be as simple as possible so that even an elderly/semi literate market can be targeted due to ease of use
3. Support multiple languages
4. Customers should be able to set timers
5. Smart Plug design will be ergonomic and aesthetic yet scalable
6. Cross Platform Support

Market Overview

The smart plug market was valued at USD 5.1 billion in 2020 at a CAGR of 42.2% over the forecast period 2021 - 2026. The use of and credence on devices that can be managed remotely through a wireless connection is growing globally, which is a fundamental factor that is driving the smart plug market.

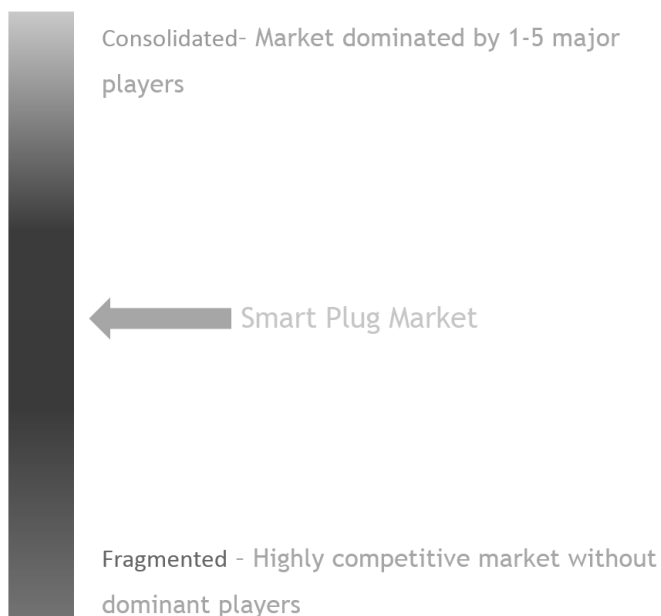
According to an industry report by Mordor Intelligence Inc.

- The Smart Plug market, owing to the rapid adoption of home automation technologies, changing consumer preferences inclining towards smart home applications, growing need for a convenient lifestyle, improved energy savings, advancement in IoT framework, high acceptance of technologically advanced products among customers and the average disposable income of the population is expected to grow at a greater pace.
- A number of other factors are slated to have an assertive impact on the demand for smart plugs in the near future. Among them, the growing demand for energy-efficient household appliances will possibly have the highest effect on stoking demand. Besides, smart plugs are also more economical than built-in smart appliances. This is also forcing up their swift adoption. Besides, the regulations released by regulatory agencies such as BEE, ASHRAE, and DOE will drive the demand for smart plugs during the projection period.
- The smart-home ecosystem is continuing its accelerated expansion, but market growth rates are directly connected to the speed of 5G implementation. Recent IoT investments by Apple, Amazon, Google, or Alibaba have transformed the landscape noticeably, giving opportunities for all sorts of companies, but have also forced market strengthening. Acknowledging the contemporary moderate user penetration, long product replacement cycles and rising device connectivity, the adoption of smart plugs will improve in the future.
- Advances in wireless technology have also empowered our ability to respond to the COVID-19 pandemic. Countries are using innovative Internet of Things (IoT) solutions, such as contact tracing applications, to mitigate the impact of the virus. These utilize a variety of technologies, including Bluetooth Low Energy (BLE), WiFi and Sigfox, incorporated into bands, bracelets, and other consumer wireless devices.

Competitive Landscape in India

In September 2020, Amazon launched its Smart Plug in India in its smart-device lineup. The Smart Plug has been designed for the Indian market. It utilizes a 3-pin socket design, supports a 6A power rating, and a state retention feature that ensures that appliances go back to their last state (on/off) in case of a power outage and resumption. The Amazon Smart Plug is priced at INR 1,999 in India and can now be purchased on Amazon India and at select Croma and Reliance Digital outlets. Hence, as a relatively new thing in the country, Impulsive tech has a lot of scope in being pioneers of this tech.

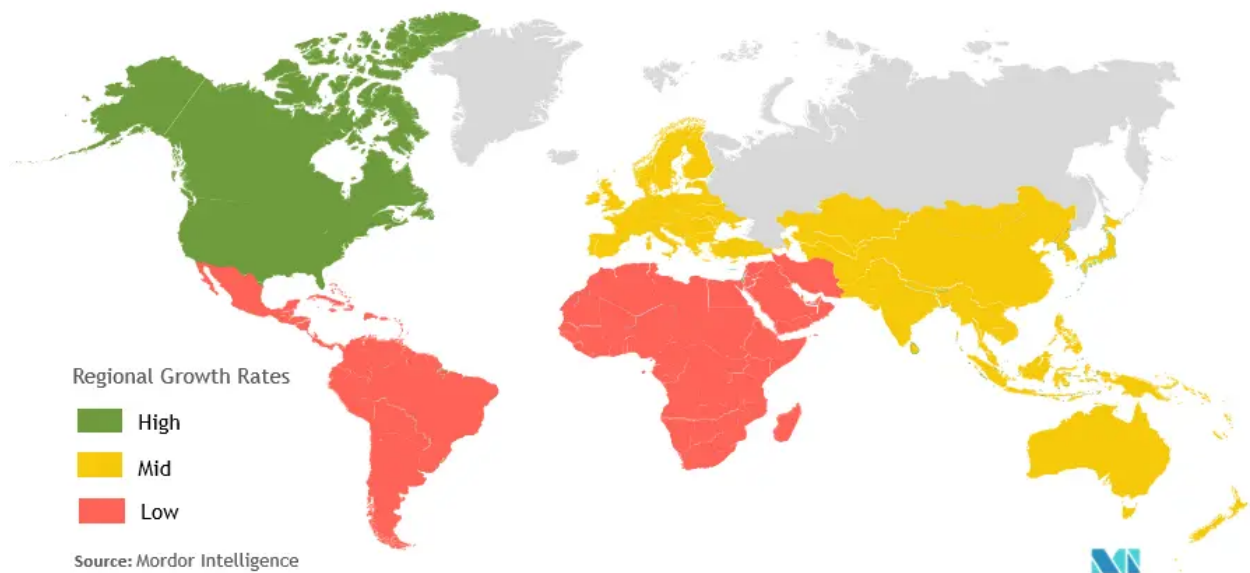
Market Concentration



Source: Mordor Intelligence



Smart Plug Market - Growth Rate by Region (2020 - 2025)



As we can clearly see, India has a lot of potential for growth and hence this should be a feasible venture for Impulsive Tech.

Ideas generated using SCAMPER:

- Substitute/Adapt

Smart Plugs can be adapted as a standard for smart home design instead of regular plug points for energy efficiency

- Combine/Eliminate

If we can control input voltage, the plug can function as a combination of a normal AC Plug point and a Regulator and hence can be used to control things like environmental lighting, fan speeds, etc.

