



Smart Home Gadgets E-Shop

Business Plan

Neacsu Sasa



What is a “smart gadget”?

A smart gadget is an everyday device that includes sensors, connectivity, and software to allow it to “see” what’s happening, to make decisions, to communicate with other devices and/or access the internet.

Some examples would be: Smart Bulbs with app/voice control, schedules, and presence detection; Smart Cameras with live view, motion detection, and cloud storage; Smart Doors with phone control and connectivity with other security devices; Smart Thermostats with geofencing, adaptive learning, remote control, and energy reports.



Why create an e-shop for smart gadgets?

While there are many general retail online stores, such as Amazon or Emag, there aren't many options exclusively for such devices.

Since the smart gadgets category of products is booming and is projected to increase even further in the following years, both in supply and demand, there is a need for creating a store that caters exclusively for such products.



Stakeholder trust - clients

For clients the search for products is confusing, trust is fragile, and post-purchase support is often lacking. There are many similar-looking devices with different chipsets, protocols, and behaviours.

For example, some earbuds might support LDAC, while others work only with SBC, a smart sensor might work with Matter, but not with Zigbee.



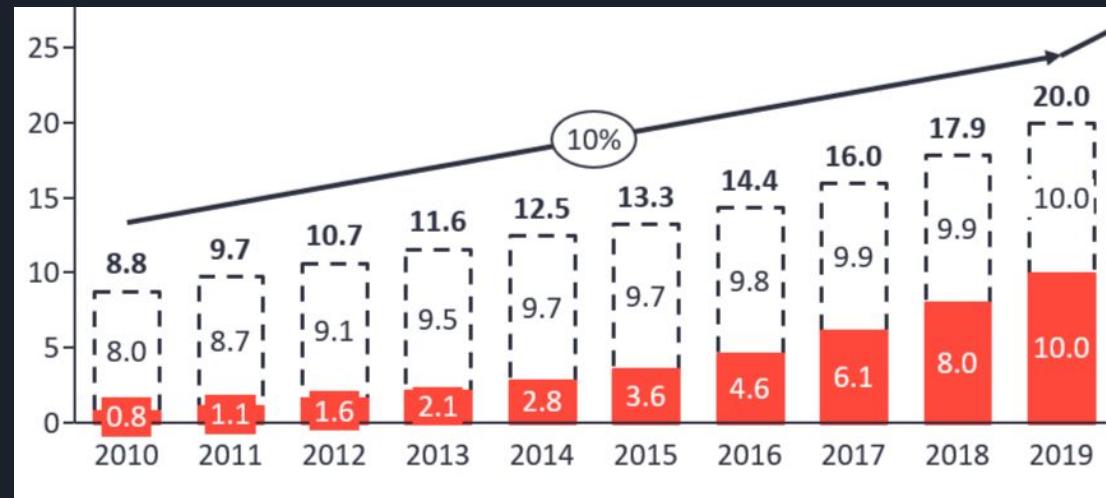
Stakeholder trust - producers

From the previous points, since clients might have difficulties in finding a perfect product for their need, the amount of sold products will be smaller than it should be.

Therefore, it would be in the interest of manufacturers for there to be a specialised shop that caters to the needs of the clients. The problems that buyers report can be useful information for producers in order to create better products in the future.

The evolution of smart gadgets market share

The increased number of IoT share of devices compared to non-IoT shows an increased interest in smart gadgets products.

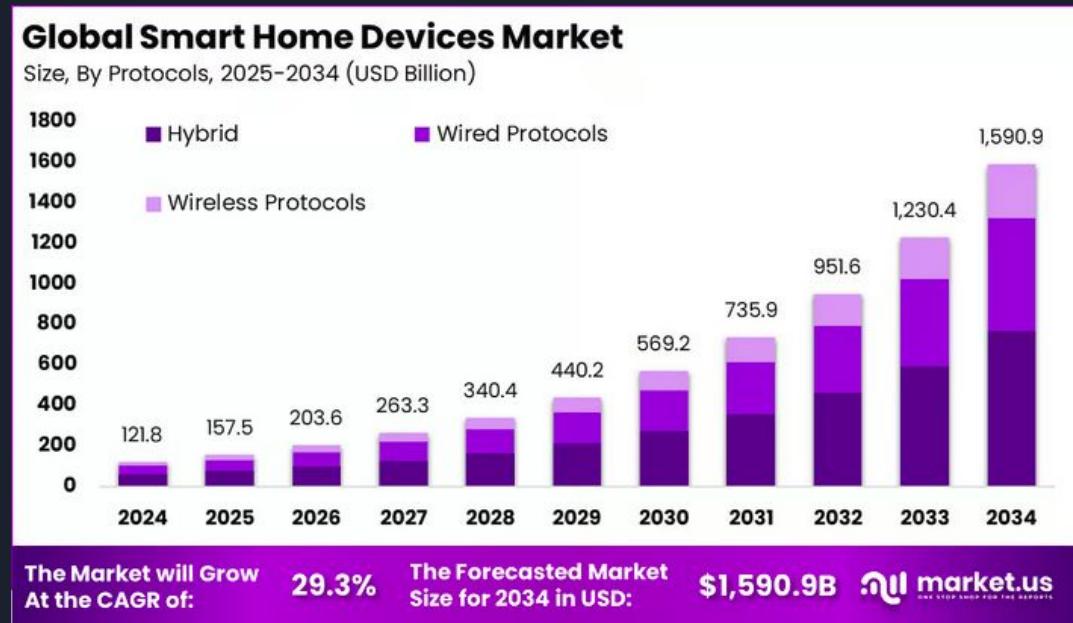


While not all IoT products are smart home devices, there is a big overlap between the two.

(Image source from IoT Analytics - iot-analytics.com)

The future of smart gadgets market share

While the history of smart gadgets is good, the projected future in terms of market size is even more optimistic. The expected increase of clients heavily suggests the need of a shop catered for such products.



(Image source from market.us)



The app - Mobile

While web applications remain dominant, there are many users today who only use a smartphone instead of a computers.

As such, as a launching strategy a mobile app will be developed first, with a website being created in the future.

There is also the fact that since the store is focused on smart home gadgets, the possible clients might be prefer to use an app on the phone, rather than a website.



The app - functionalities

The app will allow searching in curated categories and with filters, seeing different product pages, which can then be later bought and placed in a cart. There will be a checkout where the client can buy their devices. They can return products if some conditions are met.

Product pages will have reviews and specifications so that the user can understand clearly what they are buying.

Each client will have an account that they will be using in order to accomplish the specified actions.



Functional requirements - clients

Clients should be able to:

- create an account and be able to login with username and password and log out if desired
- search for products by name, category, and with filters and sort them
- view a product page with specifications and reviews
- add and remove items in their cart and later buy said items
- post reviews, both as comments and as ratings (1 to 5 stars)
- access a settings page to pick preferred options related to the app
- add items to a wishlist
- see their order history
- return an item if the conditions are satisfied



Functional requirements - sellers and admins

Sellers should be able to :

- create, edit, and delete product pages
- get statistical information about their products

Admins should be able to:

- see all accounts and disable some if necessary
- disable product pages
- get all the information about all the products (views, sells, returns)
- confirm or deny product returns



Non-functional requirements

Login:

- on a failed login, show a generic error (“Email or password is incorrect”)
- validate field before submitting
- allow a “remember me” functionality

Registration

- explain field rules before submitting and validate them
- consent checkbox for terms and conditions



Non-functional requirements

Browse:

- placeholder while loading
- categories should be as concise as possible

Search Results:

- show the active filters with one-tap remove
- adapt the products after each change and modify the result count



Non-functional requirements

Product page:

- explain specifications and the warranty conditions
- specifications should be clear and concise
- allow the user to edit one of their review once and show edit time
- there should be images for each product
- taxes should be added in a product price

Cart:

- cart contents should be persisted across sessions
- messages should be shown if the product suddenly becomes out of stock or quantity becomes lower than the desired amount



Non-functional requirements

Order confirmation:

- show an order number with a summary
- show a possible delivery windows that should be respected

Returns:

- check if all conditions are respected before use begins the return process
- an admin should confirm or deny the return after seeing all of the relevant information