JP PRODUCT SERVICES

Introduction:

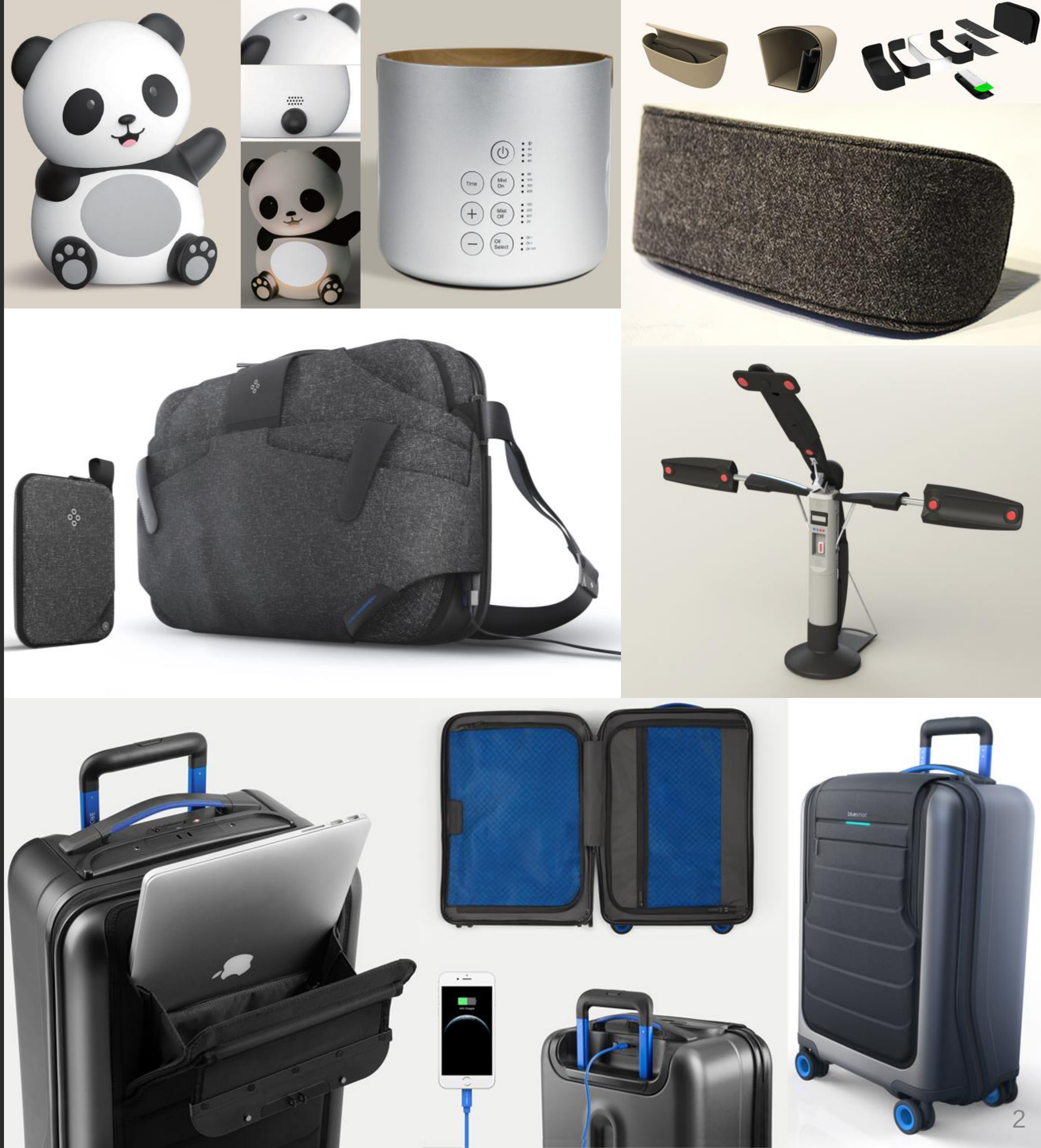
JPproductservices is a consulting service for Product Design and Development

Areas of Expertise:

- Industrial Design
- R&D
- Design Development
- Design for Manufacture
- Sustainable Adaptation

Current Sectors of Engagement:

- Consumer Electronics
- Tech Accessories
- Travel Goods



JP PRODUCT SERVICES

Tech Accessory Case Study

Brief Trend and Product Direction Analysis

- Cases -

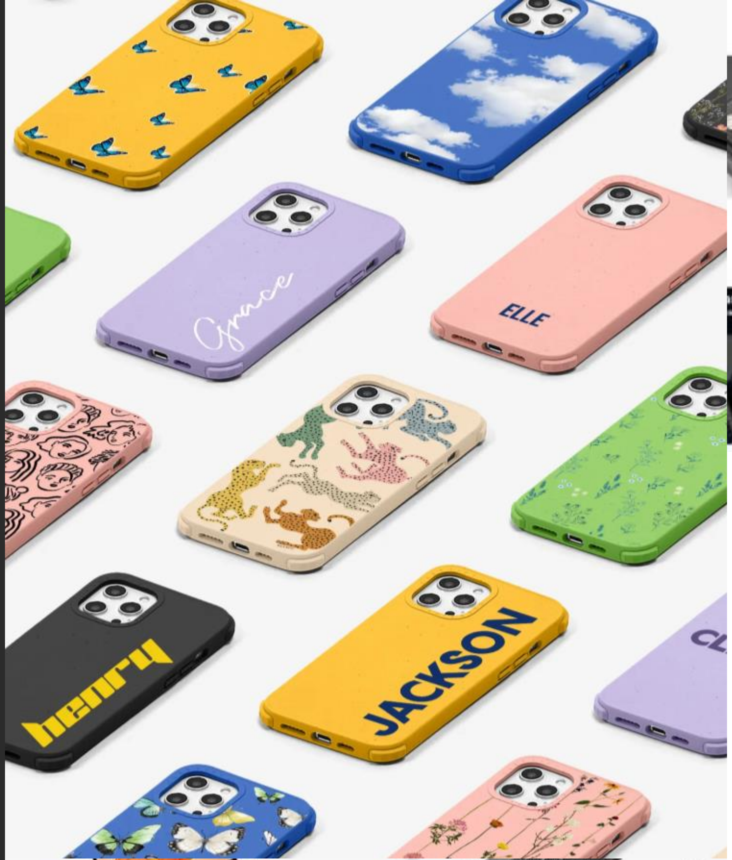
April 2023

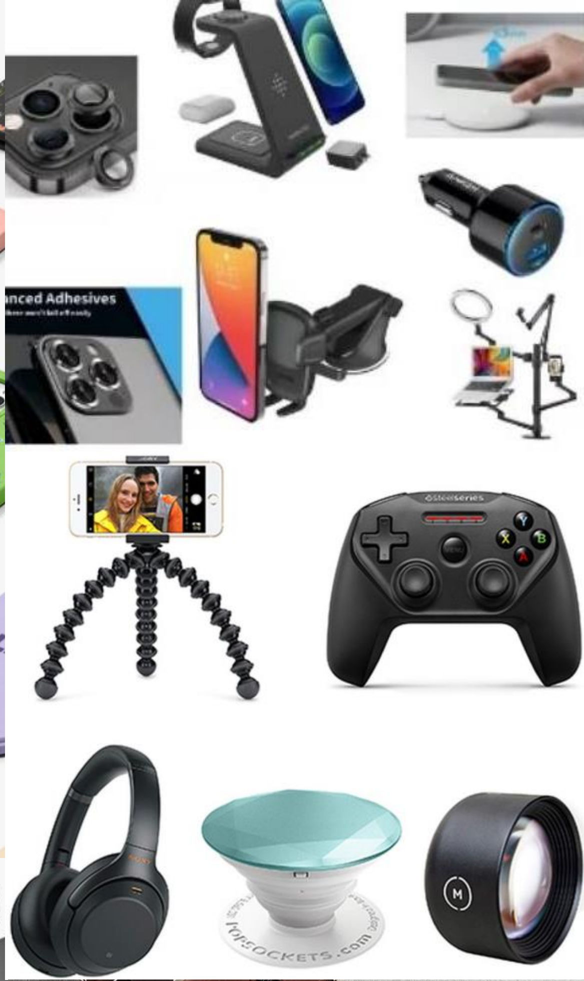
Brief:

Identify current trends and opportunities within the Tech Accessory Market

Areas of Interest:

- Market definition & study focus
- State of the market
- Competition analysis
- Style direction
- User experience
- Material options
- Colour direction
- Customization
- Upcoming technology
- Production facts to know
- Cost indicators





JP PRODUCT SERVICES

Definition of Market & Study Focus

- Tech Accessory is a broad area and covers essential and non-essential categories and can be complex or simple
- Tech Accessories are added-value products that enhance the functionality or appearance of Electronic Devices
- Tech Accessories can also be electronic or not and can consist of any material but should enhance Devices in ways such as:
  Protection / Cosmetic Appearance / Convenience / Product Life (single or multi use)
- Price range within this area is wide as are quality standards and is highly linked to usage and brand
- Simple and non-essential (SNE) accessories are the areas with the least barriers to entry and the lowest required investment
  - Devices – Phones / Tablets / Laptops / Gaming Devices / VR Headsets
  - Complex Accessories – Headphones / Smart Watches / Speakers / Controllers

This study will focus on Cases, the largest group within Tech Accessories

State of the Market

- Extremely competitive market with Device brands holding roughly 1/3 of the market and solely Case producers at 2/3
- Case brands within their own area is highly competitive with no single brand holding a dominant position
  - OtterBox would be the largest with several including Speck, Case-Mate, Incipio, and Spigen significant competitors
  - Phone Cases make up the vast majority of the Case market with over 80%
- Market growth is expected to be over 7% per year for the next 5 years with Covid having no slowing effect on growth
- A saturated market given its stable criteria, limited innovation, and number of brands and manufacturers devoted to the space
- Cases cover many Devices including; Phones, Tablets, Laptops, Sound Devices, Gaming Consoles and their Controllers
- In this space; Product Families, Innovation of materials, Customization, Personalization and Brand Image are growth methods

A difficult market to enter or expand in without offering unique selling points and brand identity

Competition Analysis

Of the larger players in the market the below are their main driving criteria and areas they are expanding into:

	OtterBox	Speck	Spigen	Case-Mate
Known for	Protection	Slim and Sleak	Affordable Quality	Premium and Stylish
Target User	Outdoor Users	Young and Fashionable	Aspirational but on a budget	Balanced approach but want customization
Areas Serviced	Phones / Tablets / Earphones / Consoles	Phones / Tablets / Earphones / Laptops	Phones / Earphones / Controllers	Phones / Earphones
Expansion Areas	PopSockets / Magsafe Eco-Friendly	Products Serviced Anti-microbial	Chargers Standing Cases	Grips/Mounts Sanitization



Style Direction

- There are 2 standard style directions for the sector, one is to emphasize protection and the other is slimline aesthetic
- Colours and materials vary significantly with hard, soft, or hybrid hard+soft materials all utilized
- Family offers – limited matching designs for different Devices are offered by Device producers and bigger Case brands
- Incorporating types of Eco-Friendly Materials is increasingly popular and driven by younger consumer demands
- Customization and Personalization are becoming popular with users wanting more uniqueness
- Partnering with designers and brands is increasingly popular to add differentiation and exclusivity to offerings

While many areas are being explored and in some cases combined limitedly, they are not yet being combined into consolidated product offerings




JP PRODUCT SERVICES

User Experience

For Cases, the UX comes from desired impression, interaction, and function

- Protection – used to protect the Device from damage – a user wants to feel the case will add a level of insurance
- Aesthetics – chosen because its design is pleasing to the eye and will either complement or elevate their perception
- Function – an added feature or ability that increases the usability of the Device
- Accessibility – the Device is just as usable as without the Case but elevated
- Comfort – the Device should be easier and more comfortable to use than without a Case
- Customization – adding the Case allows the user to make the Device more personalized and unique

Balancing the areas the user desires is useful to expanding appeal but understanding the target user’s priority order is key





Material Options

- TPU and PC comprise over 60% of all hard cases although these can be bonded with soft goods increasing their share
- EVA is the main material for soft cases, mainly for Audio Devices and Controllers
- Leather is the most popular combined material case for Devices despite its price with Silicone next due to its low price
- Eco-friendly materials are growing due to demand but are limited by the speed of material development and cost
- Recycled and Biodegradable are expected to be the fastest-growing materials for the next few years
- Disposal and Recycling existing Cases is a problem with most current cases and pressure will be applied in this area

New cases should focus on how Cases will be disposed of and/or recycled with materials chosen for this ASAP across ranges

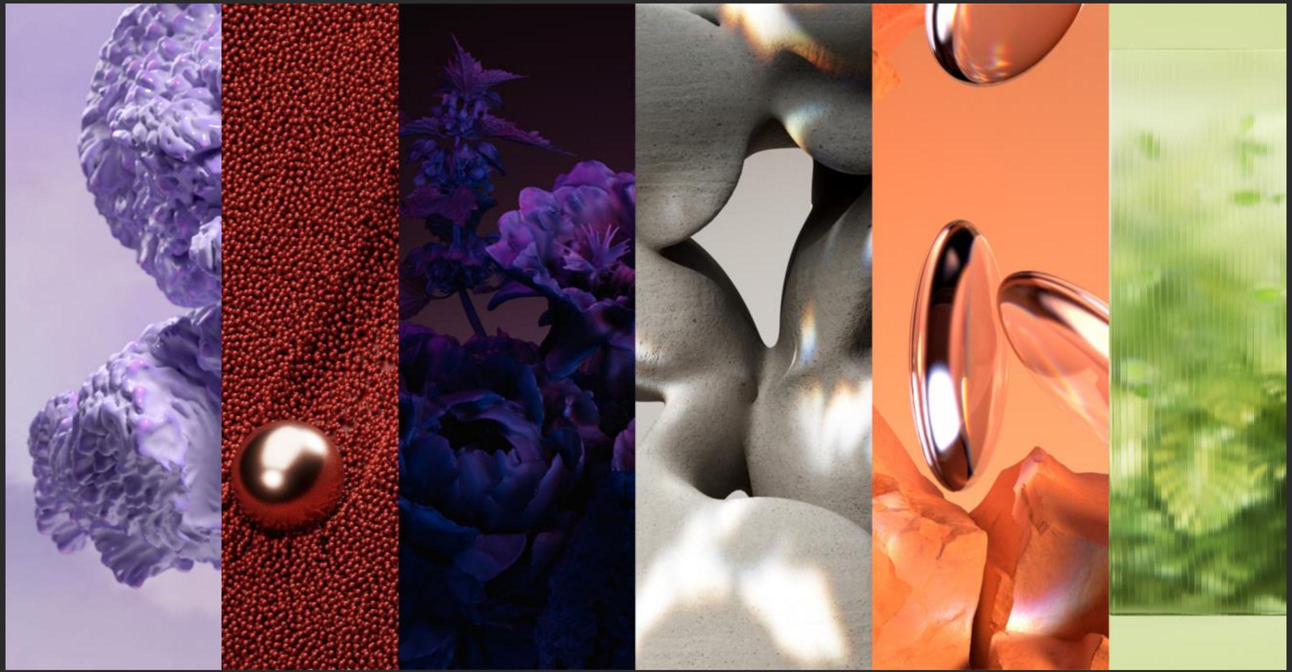



Colour Direction

- Case colours are an even broader area than for most products with options changing and adapting consistently
- Globally most popular options are Clear followed by Black, Blue, and Pink, all of which should be kept as base options
- Regionally colour preferences can change dramatically
- Clear will always be a high-selling option for Cases however, coloured options, either in areas or for the entire Case are important options
- Growing desires for customization require a range of additional colours to be offered which change each season/year

Base options are required for the widest appeal but targeted seasonal trending additional options should be included

2023



2024/25

Customization

- Customization and Personalization are hot areas within the industry and are expected to be the main areas of growth
- Personalization – vinyl wraps/skins stickers, inserts, engraving, water transfer, silkscreen, UV printing, or heat press
- Customization – adding PopSockets, Grips, or Magsafe Accessories are growing in popularity along with Straps
- Smart Features – battery cases (wired and wireless), temperature cases (by material or heatsink) and LED cases for photos

Critical for differentiation and to stand apart in the market, this area offers upselling also to increase spend and if modular it can result in repeat sales for users to continue to adapt their case with different capabilities, this is seen as very important moving forwards

Upcoming Technology

- Methods of producing eco-friendly, biodegradable, and compostable materials are hot in Cases now and expanding
- Anti-microbial gained a lot of traction due to the pandemic but is losing appeal currently
- Nanotechnology to create usable carbon materials is advancing and will be critical given its strength/thickness ratio
- Wireless Charging of multiple devices simultaneously and with higher efficiency, in general, is widely researched
- Printing electronics onto the Cases to add smart features has been under development for the last decade
- New methods of disassembling bonded or moulded materials are critical to determining usable materials moving forwards
- Anti-Hack protection is an area of protection just starting to be examined but will become widespread

A simple product, advanced technology is and will be used to differentiate, these technologies will provide USPs and appeal

Production Facts to Know

- A mature industry Injection, Compression and Forming/Bonding are widely used and unchanged for over a decade
- China remains the main producer with 60+% South Korea, Taiwan, Singapore, and the US are current alternatives
- Vietnam, the Philippines, and Mexico are expected to become new production markets also due to manufacturer expansion
- Reliability Testing and Quality Standards vary depending on country and factory used in line with the unit cost
- Hard Shells are produced through Moulding with the possible addition of Bonding/Forming soft materials
- Soft Goods are produced mostly by manually operated presses with some limited automation depending on the factory

China is supremely dominant still in this area with technical knowledge focused there, but with increasing tension between it and the US its own factories are expanding beyond its borders for production, this will expand the pool of options and should be taken advantage of as partnership deals can be made at a benefit to all sides




Cost Indicators

- China cost is increasing each year but still offers a wide range of costs depending on location and quality level
- Outside China costs are significantly lower but cannot yet handle a significant workload with expected quality issues
- Cost is mainly driven and directly impacted by the size, material and features included
- Factory Overhead, Labour Costs, Administration Fees, Logistics and Tax can vary wildly between suppliers
- Reliability standards directly relate to costs as ability to pass tests adds to the overall cost
- Customization and Personalization can greatly add to cost as suppliers are not setup to support flexibility

Features need to be analysed for overall impact on usability and user impression and eliminated if not highly favourable



Summary of Findings

- Currently 2 lines are still required – Protection / Fashionable – however, with advancements these should blend into 1
- Cost-efficient additional features are key with sustainability and customization/personalization seen as must-haves
- Including Smart Features isn't yet required but making the Case modular with different add-ons is beneficial
- Eco-materials should be used as much as possible with the ability to disassemble and added for recycling or compost
- Expansion to production outside of China is seen as required and timing is seen as correct in the current market
- As much Customization and Personalization as possible is a must to attract customers in a crowded market
- Add-on Sales by means of modular accessories and replaceable personalization can greatly aid repeat sales
- Family Offerings for full suites of personalized products which match each other and can be updated similarly are beneficial
- Exclusivity agreements on new innovative devices or materials and influencer promotion would ensure exposure and sales

The need to diversify is clear and the areas to diversify into are also clear, however, it is possible with this being clear to the market that this attempt at diversification will result in uniformity of solutions with only minor differences and it is the first mover and perceived value along with brand identity that will determine continued growth

Thank you

If this Case Study has raised interest in this area

Let’s continue the discussion

JPproductservices.com