

4 P'S OF A 3-D PRINTER

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Abstract: This paper shows an idea of the marketing plan for the consumer products of 3D System. The “3D printer” or “Additive Manufacturing” machine was invented by Charles Hull in 1984. Although Rapid Technical Development 3D printing industry was born in 2007. It was developed for Strategic Marketing and Marketing Plan course. A first evaluation of the product, the market and the company leads to a SWOT Analysis from which the marketing strategy is derived. The marketing plan is structured in three main objectives that can be achieved by specific actions on the variables of product, promotion and placement. The idea of how the 3-D printing market is growing at a high rate causing a major disruption to the Jewelry, eliminating sweat shops and fast fashion. Although more companies will follow as the range of printable materials continues to expand.

Keywords: Marketing plan, 3-D printer, Strategic Marketing, Technology.

1. PRODUCT

3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file. The creation of a 3D printed object is achieved using additive processes. In an additive process an object is created by laying down successive layers of material until the entire object is created. Each of these layers can be seen as a thinly sliced horizontal cross-section of the eventual object.

The 3D printing market is growing highly at a CAGR of 14.37% with applications across various sectors such as aerospace, automotive, consumer, government & defense, healthcare, industrial/business machines, and education & research. The overall market for 3D printing is expected to reach \$8.43 billion by 2020. 3D printing makes it possible to manufacture a product of virtually any design complexity. Hence, it is very useful for producing highly customized products with high accuracy, for example, a jaw implant for a patient or a critical aircraft component. It also minimizes the overall wastage of materials.

Testing every one of the 3D design for every printer would be excessive and tedious. An approach to sidestep this issue would be to build the quantity of free objects and keep the commercial center and the "free objects" segments separate. The likelihood of sorting by measurements would be a prompt approach to recognize the outlines that are printable at home and the ones that must be cloud printed.

HOW DOES IT WORK?

It all starts with making a virtual design of the object you want to create. This virtual design is made in a CAD (Computer Aided Design) file using a 3D modeling program (for the creation of a totally new object) or with the use of a 3D scanner (to copy an existing object). A 3D scanner makes a 3D digital copy of an object.

WHERE IS IT USED?

Product Introduction Occasion of Usage Professionals Aerospace/Defense Architecture/Geo Arts/Entertainment Automotive Education Healthcare Artists & Designers Prototyping and Object Creation Hobbyists DIY applications

Ornamental Objects Board Games pieces and Scenarios Jewelry and Fashion Families Practical Household Application Toys for Kids Personalized accessories.

Among the numerous companies using 3-D printing to increase their production are GE (jet engines, medical devices, and home appliance parts), Lockheed Martin and Boeing (aerospace and defense), Aurora Flight Sciences (unmanned aerial vehicles), Invisalign (dental devices), Google (consumer electronics), and the Dutch company Luxexcel (lenses for light-emitting diodes, or LEDs). Watching these developments, McKinsey recently reported that 3-D printing is “ready to emerge from its niche status and become a viable alternative to conventional manufacturing processes in an increasing number of applications.” In 2014 sales of industrial-grade 3-D printers in the United States were already one-third the volume of industrial automation and robotic sales. Some projections have that figure rising to 42% by 2020.

LATEST DEVELOPMENTS:

Recently, many IT companies like Microsoft and Google enabled their hardware to perform 3d scanning, a great example is Microsoft’s Kinect. This is a clear sign that future hand-held devices like smartphones will have integrated 3d scanners.

2. PRICE

Prices of 3d scanners range from very expensive professional industrial devices to 30 USD DIY devices anyone can make at home. Consumer 3D printer production has been focused on driving the price down to something more affordable. – 3D printing in Strong and Flexible Plastic (nylon) is a generally proficient procedure that depends most vigorously on the measure of space your item takes up in a machine. Items that are colored or cleaned are more work serious. So as to adjust these expenses to the value offered, it costs solid and adaptable plastic in light of Machine Space, Material and Labor per Part.

The price is mainly based upon the material used in the product which we want to make.

The breakup goes like this:

Every individual part should be situated and arranged with different parts before printing. We call this stride "plate arranging." Then it must be cleaned, sorted and bundled. Colored and cleaned parts need to experience a couple of more steps, expanding the expense per part.

For most items, work is a moderately little segment of the cost, yet for high part tally items it can be extremely huge. See out Best Practices for High Part Count Models for more data on diminishing the expense of multi-part models.

Startup cost - Flat rate for each 3D document.

Most different materials have a solitary startup taken a toll for every record transferred that envelops the machine and work expenses of making that item. Notwithstanding, numerous have limits on most extreme part tally per record to oversee expense and unpredictability.

For the cast metals (Brass, Bronze, Silver, Gold, and Platinum), we permit 2 sections for each document (the length of they are indistinguishable) to bolster hoops and sleeve buttons.

3. PROMOTION

We will compose e-challenges each month, both to elevate the site and to include more individuals in the online group. Every challenger will have the capacity to transfer his/her own particular venture that will be assessed by different clients through a rating framework. The fashioner of the best venture of the month will win 5 free 3D printer cartridges. This system will likewise fortify verbal exchange and pull in new clients.

E-promoting:

We mean to make a viral online development made of short advertisement recordings that can spread item mindfulness and empower interest of potential clients. The center component of the promotion is a Retrofuturistic idea, ready to excite the Generation X and every one of the sympathizers of the creator development. Genuine and potential clients of a 3D printer are innovation situated individuals, so the fundamental limited time apparatuses will be online recordings and advertisements. "Today is yesterday's universe of tomorrow" We built up a straightforward include with scenes from Star Trek and Twilight Zone to imitate a Retrofuturistic subject. The music has a place with Hypnagogic pop regularly utilized as a part of Retrofuturistic works of a Advancement Fairs and Events Taking part in fairs and business occasions is critical to be up and coming with the patterns of the division. It additionally empowers the organization to comprehend the interest and to arrange. There are a few universal fairs far and wide that present the latest patterns in innovation and outline, which the organization ought to partake to: London, Paris, New York Milan Berlin

Advancement Project Evangelist " four aggregate evangelists are required: one in the US, one in Japan, one in Germany and one in the Netherlands. By 2015 we they will be additionally in Korea, UK, Italy, Russia and China. Four showcasing chiefs, one in every nation, are expected to handle the task. They're as of now utilized by the organization. The objective is to produce and create positive word - of - mouth, especially in online groups. We need to base in nations where we need to enter in mass retailers additionally in nations that we accept have a high developing potential in online deals. Advertising evangelists serve as brand directors. They are in charge of creating and dealing with the personality of a brand from start to finish. Their information will influence innovative work, client administration, and showcasing, among others. Eventually, they will probably make important and excellent encounters for client

4. PLACEMENT

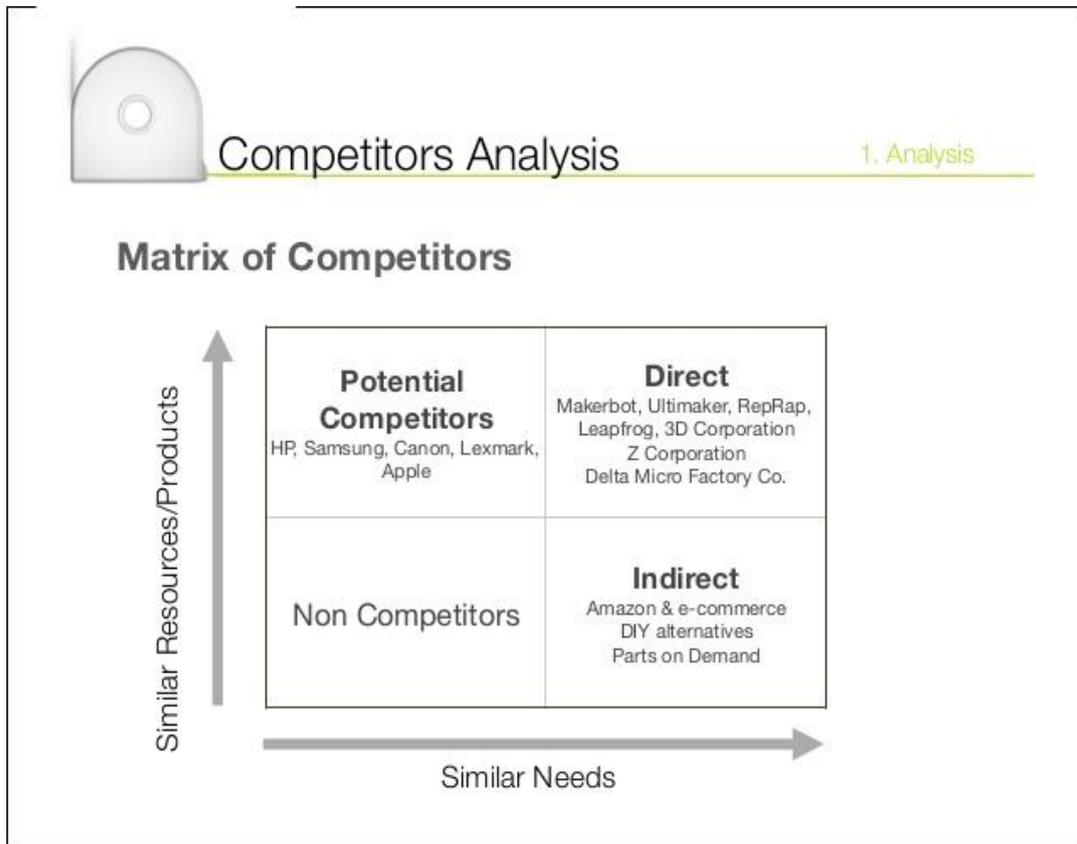
Entering Mass Retailer Distribution:

Where?

Europe Is a vital zone for our organization in light of the fact that here is the place our generation focus of purchaser printers is based. Europe offers a rich retailing market and short separation between purposes of offers. Besides, the enthusiasm for configuration arrives broad and this region leads worldwide patterns in the field. Germany and Netherlands: Germany and Netherlands together make about the 20% of Europe aggregate populace. Germany's turnover worth's 1/4 of EU aggregate estimation of innovative assembling and the gross residential consumption in R&D is the third of the mainland, after the Scandinavian nations. Retail deals every year in the range keep up a positive development regardless of the monetary emergency and customer's confidence rate is one of the most noteworthy in Europe. Both Germany and Netherlands are known not prestigious outline schools and qualified proficient creators, in this way a sensibility for item creation.

Arrangement Entering Mass Retailer Distribution " Specialized mass retailer: Media Market stores. Media market is the best concentrated retailer in Europe and will permit us to extend likewise in a major business sector like Russia. " Germany: 235 stores " Netherlands: 25 stores A sum of 288 Cube and 108 Cube X Duo in the Netherlands and 2592 Cube and 972 Cube X pair in Germany. We will approach Russian market in 2016 and Italian market in 2017 with the same retailer organization. Russia is an intriguing and developing business sector for new advances and Italian market has been indicating enthusiasm.

Positioning /differentiation Evaluation of product, service, and brand impact on customer value. Work on the augmented product service: We focused on the company online sharing platform because it is a key to move towards the usability of the product as well as brand recognition and gain competitive value.



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