

Overview

The LightPen3D is currently in its development phase. The concept is a device that allows users to draw free-hand, three dimensional light paintings without the use of a long exposure camera. The user moves an LED pen in front of a 3D camera and on the screen the LED appears to leave a floating trail in the air. The user can edit this drawing and rotate it. This gives users a natural-feeling and fairly accurate way to draw 3D objects. The device is also preferable to traditional light painting because it can be used in more lighting conditions, can be edited, and can take as long as one likes. The LED pen consists of a start/stop recording control, an undo button, and adjustments to modify the color of the LED. The pen connects wirelessly to the camera base. A user's computer is involved as well to do the video processing and display the resulting image.

Value Proposition

The LightPen3D can offer an accurate freehand method for creating 3D images. The LightPen3D is more natural feeling than existing 2D to 3D options, more natural and artistic than solutions that digitally insert the image, and more user friendly than traditional light painting.

User Profile

The typical LightPen3D user is a casual artist who would like to explore Light Painting but has never had the time or patience to learn the difficult art form. They are likely young and adventurous but busy and varied in their interests.

Segmentation

- *Experienced Digital Artists (Visionary)*: Have previous knowledge of digital art techniques, especially Light Painting. Already create digital art. Looking for a more efficient way to work.
- *3D Modelers (Early Adopters)*: Enthusiast or professional 3D modelers who would like a more intuitive way to create models.
- *Casual Artists (Main Market)*: Casual artists who want to practice their hobby without too much hassle.
- *First-Time Users (Late Adopters)*: New to Light Painting and maybe to digital art. Discouraged by the learning curve of many traditional art forms. Want a product that will enable them to create expressive artistic creations without the challenges of many traditional art forms.

Target Markets

- *Primary*: Casual artists and hobbyists who would be interested in an easy way to create Light Paintings.
- *Secondary*: Serious Light Painters who would like an easier way to work.
- *Tertiary*: 3D modelers who want a faster and more intuitive way to create 3D graphics.

Measuring Potential Market

By investigating similar products that have released in recent years and measuring their success, we will be able to estimate our potential market. We will look broadly for any products that give consumers a new creative outlet that fits into their busy lives but still gives them the opportunity to be artistic. We will measure their ability to penetrate their target markets. Finally, we will take this market share and apply it to the total addressable market for the LightPen3D.

Positioning for Primary Market

Who is it for?: Casual artists and hobbyists who are interested in Light Painting.

What is the need?: Traditional light painting is too difficult for casual artists. It requires expensive equipment, knowledge of photography, and ideal lighting conditions.

What is the Product Name and Type?: The LightPainter3D is a Digital Art Tool.

What are the Key Reasons to Buy?:

- Main: Easy way to create beautiful, expressive art.
- Low-cost.
- Has Multiple Applications.

What is the Primary Competitive Advantage?:

- Main: Easier to learn/use.
- Less expensive.
- Doesn't require perfect lighting.
- Has additional features like editing on the fly.
- Fast.

Marketing Mix

- *Product:* The Product is already well defined.
- *Price:* Plan to use a traditional retail pricing model.
 - Consumers pay one time for the hardware and accompanying software.
 - Consumers receive free software updates.
 - Price will be in the ~\$150 area. Based on estimated parts costs and competitor pricing, this puts us below competitors but still enables a good profit margin.
- *Placement:* Traditional Retail and Online
 - This product would fit in well at consumer electronics stores like Best Buy.
 - Online electronics and computer equipment shops would also be a good fit. New Egg and Amazon and major electronics retailers and already sell digital art equipment like drawing tablets.

- *Promotion:* Celebrity artist endorsement. Online marketing a focus, as well as targeted television advertisements. Trade shows.
 - Find a celebrity artist, or multiple artists, who would be willing to endorse this product and star in a commercial for the web and television.
 - Another series of advertisements shows people struggling with traditional art forms then compares it with the LightPen3D.
 - Online advertisement, targeted at consumer electronics stores, artistic websites like DeviantArt, and art school websites.
 - Get a booth at a major trade show like CES or Artexpo.
 - Perform demos at consumer electronics stores to show people how easy and fun the product is to use.
 - Sponsor artistic events like art shows.

Marketing Elements

Strategic:

Segmentation and positioning can be found above.

Industrial:

- Build the brand through celebrity endorsement. Show people that this is a product that is good enough for a professional artist to use but simple enough for a normal person to pick up and try.
- Also sponsor artistic events to create the image that this is a professional-quality device.
- Send test models to gadget review sites like Engadget, Gizmodo, and Cnet.

Revenue:

- Use advertisements to build awareness.
- Place demo models in stores that consumers may try. The user experience is core to this product's success. If we can get people to experience this, we can create a desire for the product.
- If economically viable, offer a money-back guarantee to encourage consumers to try the product.
- Host online art shows of user submitted work that has been created with this product.

Product:

- Use competitive pricing to draw in consumers.
- Make product widely available in stores and online.
- Possibly bundle the product with other products like Adobe Photoshop which could be used in tandem with our product to create impressive works of art.