

HP 3D Jet Fusion Print Case Study

PROJECT DESCRIPTION

3D Print is positioned as the future of HP print operations. It offers an innovative solution for functional prototype development, efficient and on-demand production of manufacturing aids, and a cost-effective method for parts production. HP 3D Jet Fusion technology can produce both non-metal color and metal parts at up to 10x the speed with half the cost of traditional prototype and functional part manufacturing.



HP 3D Print is focusing on material science through the HP 3D Open Platform Materials and Applications Labs to advance material chemistry and functionality to promote the evolution and widespread adoption of 3D printing. HP is inviting materials companies to work in a collaborative lab environment. Located in Corvallis, Oregon, the new HP 3D Open Platform Materials and Applications Lab is the world's first state-of-the-art lab helping companies develop, test, certify, and deliver the next generation of materials and applications for HP 3D printing.

BUSINESS RATIONALE

3D printing is expected to grow to \$33.58 billion by 2022 with a CAGR of 27.9% between 2017 and 2022. This will include a transfer of utility from predominantly prototype applications to production part manufacturing. HP is an industry leader in 3D print technology with Jet Fusion technology in both metal and non-metal media printer production. The design and production for this is done largely in Vancouver, WA, Barcelona, Spain and Corvallis, OR.

Why an Agency

3D printing is in wide use in prototype and personal applications, however it is in development for adoption in a production environment. As this transition matures, the needs of the business change. Using services from an agency like Paradigm provides a flexible way to adapt to these changing conditions. By offering project-based engagements, highly skilled technical resources, and lifecycle-wide support, Paradigm is positioned to work with HP to identify, evaluate, and provide the level of service needed to meet the growing needs of a new print technology.



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PARADIGM'S CONTRIBUTION

Paradigm supports this product's design phase with team members working in various phases of interaction and user interface design, visual design and packaging, as well as marketing project management. Paradigm also supports 3D print release and production phases with marketing project management and material science.

User Experience Designers

Capture requirements and, using research and user-centered design, define the entire customer experience when interfacing with 3D print products. Describe the workflows and interactions from initial promotion to enrollment to fulfillment. Present findings to program teams and stakeholders. Create specifications, mockups, and wireframes to development and design teams.

Interaction Designers

Develop prototypes and interactions for each solution on various platforms (desktop, mobile) and operating systems (Windows, iOS, Android). Interface with development teams to ensure designs and interactions are implemented, or where necessary, modify by agreement to meet development timelines, feasibility, and future scope planning.

Visual Designers

Create consistent, brand-compliant visual assets such as iconography, transitions, and motion graphics. Develop and maintain pattern libraries. Produce presentations outlining user experience workflows, partner on-ramps, user metrics.

Illustration and Motion Designers

Create artwork for web, application, etc. using visual effects, animation and other techniques, then use digital animation processes to create the illusion of motion or rotation. This is done in conjunction with haptic process to generate a user experience.

Marketing Product Managers

Conduct market research on 3D print market, collaborate with cross functional teams to develop new product development timelines, influence pricing and packaging, provide guidance to sales and marketing teams, help to develop messaging and market positioning.

Chemical Technicians

Perform formulations or analysis of materials and components using standard chemical/laboratory instrumentation for R&D, product development, and manufacturing activities. Perform advanced material research on both non-metal and metal medium for 3D printing.