

Monarch Media, Inc., Case Study

# Digital STEAM Workshop

Using Agile Methodology to Redesign an Educational Content Delivery Platform

Monarch Media, Inc. 406 Mission Street, Suite J Santa Cruz, CA 95060 www.monarchmedia.com 831.457.4414

### Industry

**Software Education** 

## Challenge

Autodesk, Inc. wanted to redesign the Digital STEAM Workshop as a portal for all Secondary Education users, including students and less technical teachers, not just its current audience of Secondary Education instructors with a high level of technical expertise.

### Solution

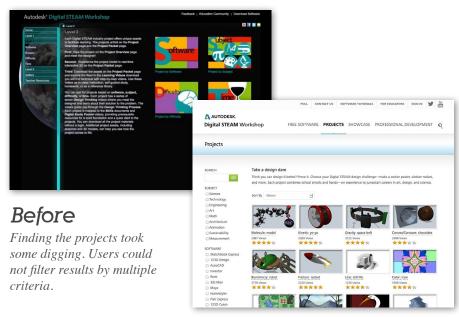
Using Agile methodology, Monarch Media met Autodesk's needs for quality and speed by deploying a cross-functional team that included user interface designers. programmers, instructional designers, and researchers. At Autodesk's request, we focused on increasing site friendliness and simplifying access to deep content. The end result was a site that significantly increases educator and student access to Autodesk's resources to improve STEM (science, technology, engineering, and math) education for a global audience.

## **Key Benefits**

- Improved the student and teacher user experience
- Increased accessibility of deep content
- Agile development allowed the flexibility to adapt to changing requirements while still delivering the re-designed site quickly

### Overview

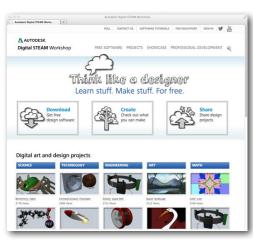
- Improved UX: The primary goal was to make the Digital STEAM Workshop more accessible to students by tailoring the user experience (UX) with clear steps, a modern palette, and friendly imagery.
- Access to Deep Content: By implementing one-click access to projects and a smart multiple-criteria search engine, Monarch made the projects both more approachable and easier to sort through.
- **Agile Approach**: On this project, the Agile approach allowed Monarch to quickly and flexibly adapt to new information and requirements while still meeting the client's tight timelines.
- **Big Results**: Although the initial redesign was completed in just six weeks, the new Digital STEAM Workshop has been integrated into the Design the Future campaign as the supporting learning resource for President Obama's ConnectED Initiative, and site traffic has increased by 100%, reaching more than 13,000 users in one quarter. The collaboration between Monarch Media and Autodesk continues, as the site and its capabilities are expanded.



### **After**

Users can now get to the projects with one click, and search by multiple criteria, or use the project-specific search box.

By focusing the content into three approachable choices, Monarch simplified previously dense content into an easy and userfriendly UX.



Monarch implemented a modern design, with navigation clearly focused on free educational projects.

## The Project

### Client

The Digital STEAM Workshop is the primary portal Autodesk, Inc. uses to deliver educational content for the Secondary Segment of its Education division. The site is used to deliver STEM-based curriculum and develop the next generation of innovators using Autodesk, Inc.'s suite of products.

#### Need

The site was originally developed as a resource for instructors with a high level of technical expertise. It was targeted for redesign as a portal for all Secondary Education users, including students and less technical teachers. Autodesk needed a redesigned site that would meet the expectation of its new target audience.

Autodesk also needed the site completed quickly and in an environment where requirements were still evolving based on audience research and feedback.

### Method

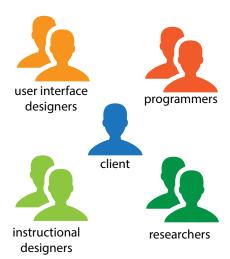
To meet Autodesk's needs, Monarch Media employed an Agile methodology to rapidly redesign the user interface with a focus on usability and learning design. Agile is a methodology based on iterative and incremental development, and it allowed Monarch to deploy a cross-functional team that included user interface designers, programmers, instructional designers, and researchers. We worked closely with Autodesk's stakeholders to focus on increasing site friendliness and simplifying access to deep content.

The end result was a site that significantly increases educator and student access to Autodesk's resources to improve STEM (science, technology, engineering, and math) education for a global audience. Monarch's Agile approach allowed us to quickly and flexibly adapt to new information and requirements while still meeting tight time lines.

### What Is Agile?

"Agile project
management is
an approach for
managing a creative
project process, where
team members both
accept and expect
change along the way.
The team develops
successive iterations
of a product and
uses their resulting
observations to further
improve the result."

-- Megan Torrance, Learning Solutions Magazine http://www. learningsolutionsmag.com/ articles/1406/



Monarch's development team included user interface designers, programmers, instructional designers, and researchers.

## Improved UX

The primary goal was to tailor the user experience (UX) to incoming students looking for STEM educational materials. The usability of the website AND the learning content was redesigned to be accessible via clear and useful steps. To increase appeal, Monarch chose a refreshing modern palette, in conjunction with friendly imagery.

By focusing the content into three approachable choices, Monarch simplified previously dense content into an easy and user-friendly UX.

## **Access to Deep Content**

On the original site, Autodesk had such a large number of STEM resources that it was hard for students to know where to start. By presenting one-click access to projects, and implementing a smart multiple-criteria search engine, Monarch made the projects both more approachable and easier to sort through.

## Agile Approach

Agile is known for allowing ultra-fast turnaround by using intense development methods. Monarch believes in Agile done right, which means more ongoing dialogue with the client. This approach brings laser focus to the goals at stake, so that development effort can be applied with maximum precision.

Maintaining crystal clear communication allowed Monarch's project managers to know where to scale back when new features are added, which kept the project within scope as deliverables evolved. This flexibility is especially essential when a client begins development with a general idea of what they want, but not necessarily an itemized specification.

To help make the Agile methodology a success for this project, Monarch Media and Autodesk communicated daily, passing back and forth ideas and solutions. We used prototyping to quickly demonstrate features and design elements that Autodesk could use to generate new ideas and approaches. "Working
with Monarch
using an Agile
development
approach was
crucial for the
project's success.
We were able to
make changes
as we went and
Monarch was
very responsive
to our evolving
requirements."

--Autodesk, Inc.

## **Big Results**

Monarch Media completed the initial redesign in only six weeks, presenting the site to Autodesk's team and stakeholders in August 2013. The companies are currently working together to grow and expand the site and its capabilities, with the goal to continuously expand its reach and usefulness as a tool to help teach students worldwide learn critical STEM skills.

During this time, the new Digital STEAM Workshop has been integrated into the Design the Future campaign as the supporting learning resource for President Obama's ConnectED Initiative. And over the initial six months, site traffic has increased by 100%, reaching more than 13,000 users in the most recent quarter.

http://www.autodesk.com/campaigns/design-the-future-us/home

## More Information

To learn more about how Monarch Media can help you with your next eLearning project, please call, email, or visit our website:

Monarch Media, Inc. www.monarchmedia.com 831-457-4414 info@monarchmedia.com

To learn more about the Digital STEAM Workshop, contact Autodesk, Inc.

Autodesk, Inc. www.autodesk.com