

Fusion 360 IdeaStation User Forums

OCTOBER 2016

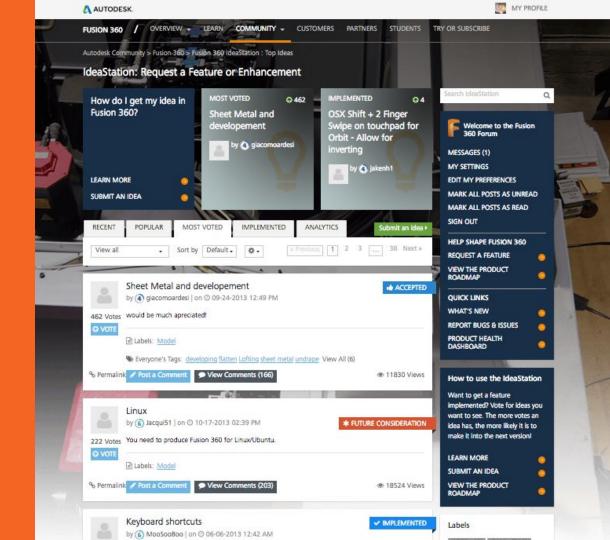
Allison Leach

Sr UX Reseacher

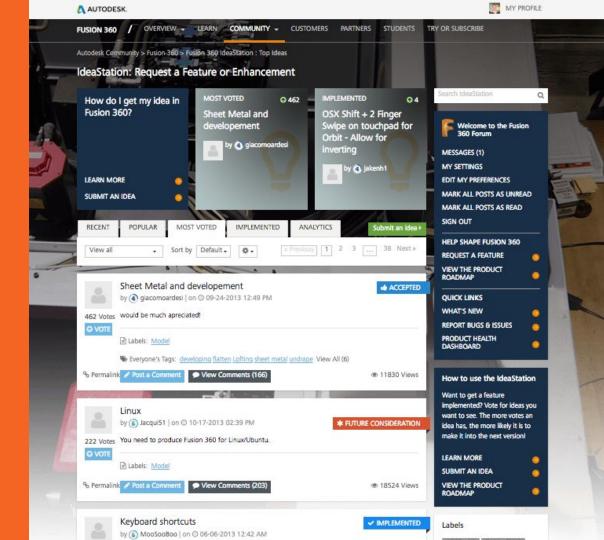
GA: Intro to Data Science



Fusion 360 is
Autodesk's first
cloud-based 3D
modeling product
with both CAD and
CAM software
capabilities.

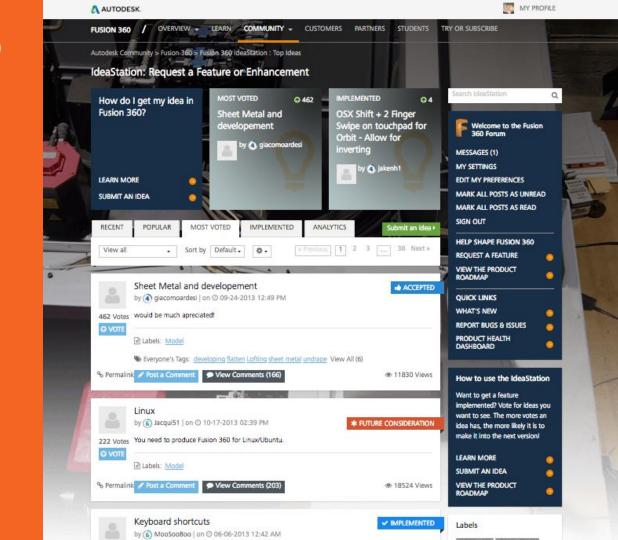


As a contributor to the *maker movement* (esp to hobbysits, start-ups), Fusion has the most active community of users of all Autodesk products – from online forums, to offline MeetUps and workshops.

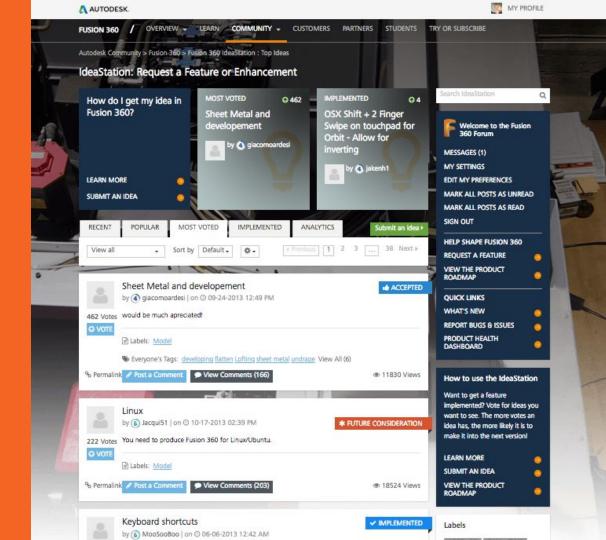


For example, Fusion's *online communities* include:

- * Learning Center
- * Forums
- * IdeaStation
- * YouTube
- * Twitter
- * Facebook

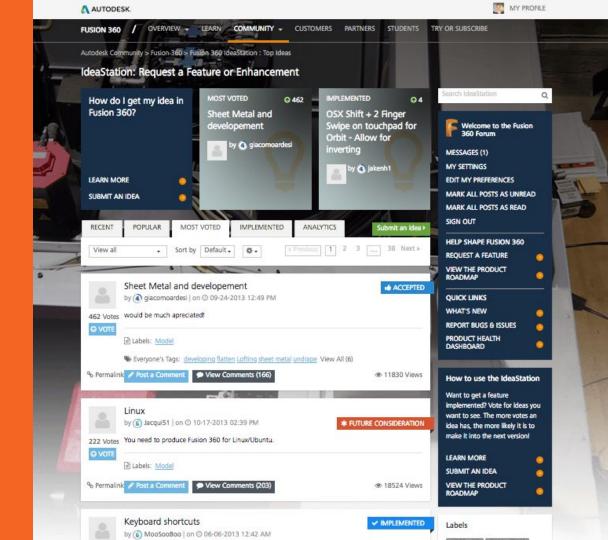


However, even though the
Fusion team regularly engages
with users across these
channels, anlaysis of users'
voices is a time-intensive,
manual and qualitative
process – resulting in an
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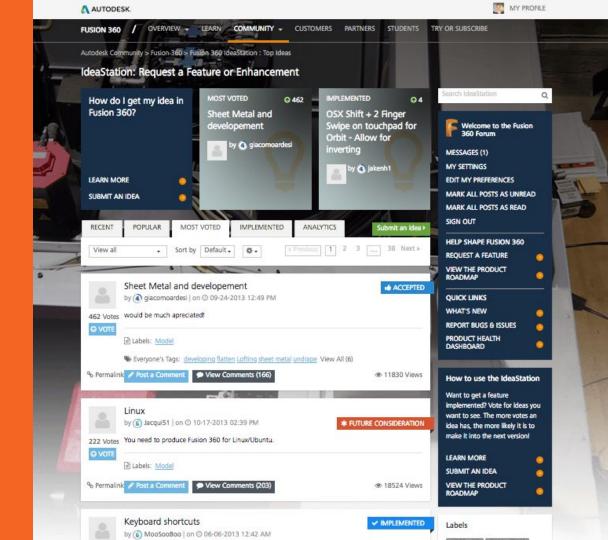
(*hint: we have no data scientists!)



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(*hint: we have no data scientists!)

(**just one ambitious user researcher!)



The **Subject**

Fusion 360 IdeaStation

What it is

 An online forum where customers can share their ideas to improve Fusion 360

What it's for

- A way for customers to communicate with Fusion's design team
- A way for customers to form an online community

How it's userd

- To exchange ideas for product improvements
- To vote and comment on other user's ideas
- To identify design ideas to implement in Fusion 360

The Question

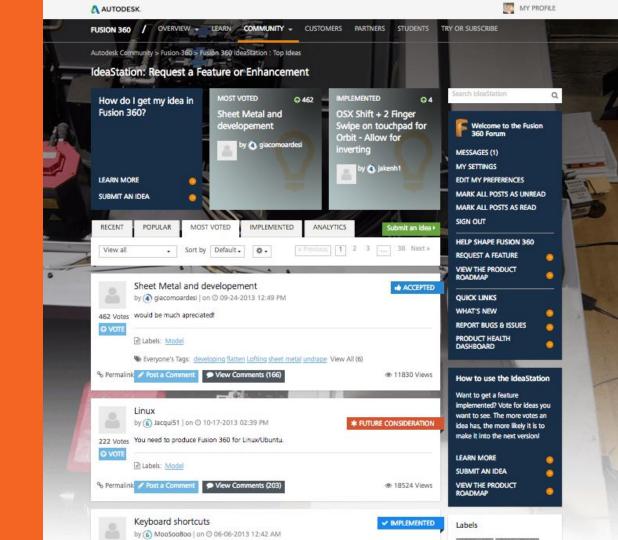
Are we making improvements that users actually care about?

S

- Are we making design changes that reflect the voices of our online user community?
- How are ideas from the IdeaStation reviewed today?
- Which ideas are implemented?
- In the bigger picture, does our product roadmap reflect concerns that users point out in the IdeaStation?

IdeaStation Posts

Link to website



IdeaStation Posts

Link to website



I'm leading a small development team in Autodesk that just joined the Fusion family to help to make

it even more successful. There is nothing better than getting feedback directly from You – Fusion users. Please take a look at the video and let me know your opinions, suggestions and thoughts. I

(If that kind of direct communication between development and customer community would be

interesting to you I may be setting up a blog here - we did also a proposal for Gear tool that would

quickly produce gears with exact geometry ready for 3D printing and some other interesting stuff.)



Idea Statuses

Gathering Support (1,584) Under Review (4) Future Consideration (662) Accepted (203) Implemented (379) Archived (949)

IdeaStation Dashboard

New Idea Ideas Admin

Top Tags

Sketch CAM Claas
AdvMod export
user interface Timeline
Model render Pattern
rendering component
Drawings Simulation UI
Import animation UX cloud
assembly components stl
text 3D Printing bug
Constraints move browser
drawing mesh

View All

Completed Ideas

@ 7713 Views

ACCEPTED

cloud sync - upload deltas and in reverse chronological order API Text Editor Options ✓ Extruding Offset from Surface %



we seriously need folders in the browser

Everyone's Tags: bolted connection View All (1)

would really appreciate it.

Thanks for your time,

Labels: General Model

Vasek

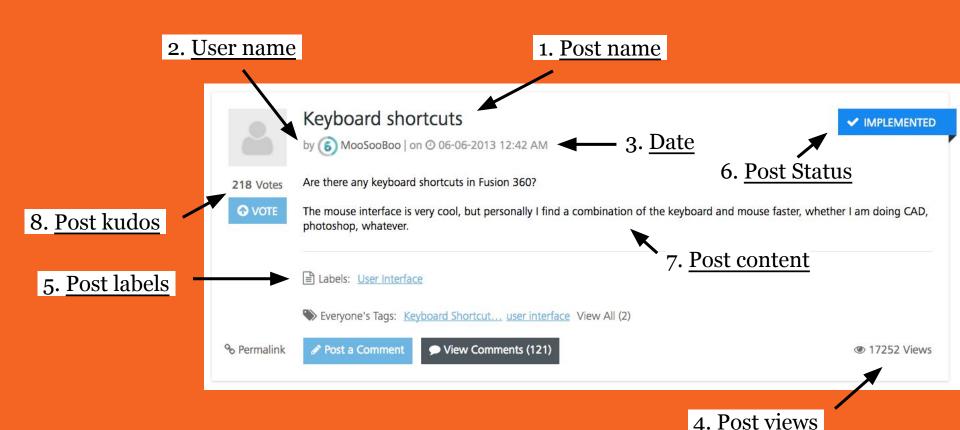
% Permalink / Post a Commen

by (ii) cekuhnen | on (i) 11-20-2014 10:30 AM

185 Votes here a friendly reminder that with you start having many objects your browser gets hard to use

View Comments (52)

Post Features Scraped





The Business Context

Good UX means good ROI

According to FastCo, every dollar spent on UX brings in between \$2 and \$100 dollars in return (1)

- With today's market of user-friendly products, **customers will seek** alternatives if their voices go unheard. Companies risk losing their users, brand credibility, and revenue.
- The Design Management Institute estimates **design-led companies** outperform the S&P by 228% (2)



The Method

Create a model that predicts the likelihood of an idea being implemented

- Use Google Sheets to scrape the summary content of IdeaStation posts:
 - a. Author
 - b. Date
 - c. Category
 - d. Content
 - e. Status
 - f. Kudos (votes)
- 2. Connect data to Jupyter notebook

- **3. Cluster posts** by theme, status, and similar words
- 4. **Write a model** that predicts "Implemented" post status

Scraping the forums

Data dictionary

- 2 types of machine learning
- 2. metrics
- 3. Compare to null model score, if supervised,
- 4. r2 score
- 5. 1-2 slides representing data dictionary (rows/columns)
- 6. process / what you learned

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7

Machine learning

Model #1

- 2 types of machine learning
- 2. metrics
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7.

Machine learning

Model #2

- 2 types of machine learning
- 2. metrics
- 3. Compare to null model score, if supervised,
- 4. r2 score
- 5. 1-2 slides representing data dictionary (rows/columns)
- 6. process / what you learned

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Machine learning

Null model score / R2 score

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- 2. metrics
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Outcome What I learned

- 2 types of machine learning
- 2. metrics
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Outcome Next steps

- 1. Analyze other forums
- 2. Share with other product teams

d

- 3. Using for other forums
- 4.

