

The Very Latest in Cool Technology from Autodesk Labs

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Class Summary

At Autodesk® Labs, we preview exciting future technologies for architecture, engineering, and construction; manufacturing; media and entertainment; and other industries. The technology we work with is too new to be a product but can be used to gather valuable customer feedback for evolving projects into possible future products. In this class, we will show some of the latest and greatest technologies available on Autodesk Labs, explain how Autodesk provides these free technology previews to customers, and show how you can get the very latest in technology to help shape the future of our products and services. This is your opportunity to see where Autodesk might be going with new technologies.

Learning Objectives

At the end of this class, you will be able to:

- Understand the purpose of having an Autodesk Labs
- Find and try technologies you can preview for yourself
- Use multiple ways to provide feedback to help shape the future of Autodesk products and services

Right class?

Safe Harbor Statement

We may make statements regarding planned or future development efforts for our existing or new products and services. These statements are not intended to be a promise or guarantee of future delivery of products, services or features but merely reflect our current plans, which may change. Purchasing decisions should not be made based upon reliance on these statements. The Company assumes no obligation to update these forward-looking statements to reflect events that occur or circumstances that exist or change after the date on which they were made.

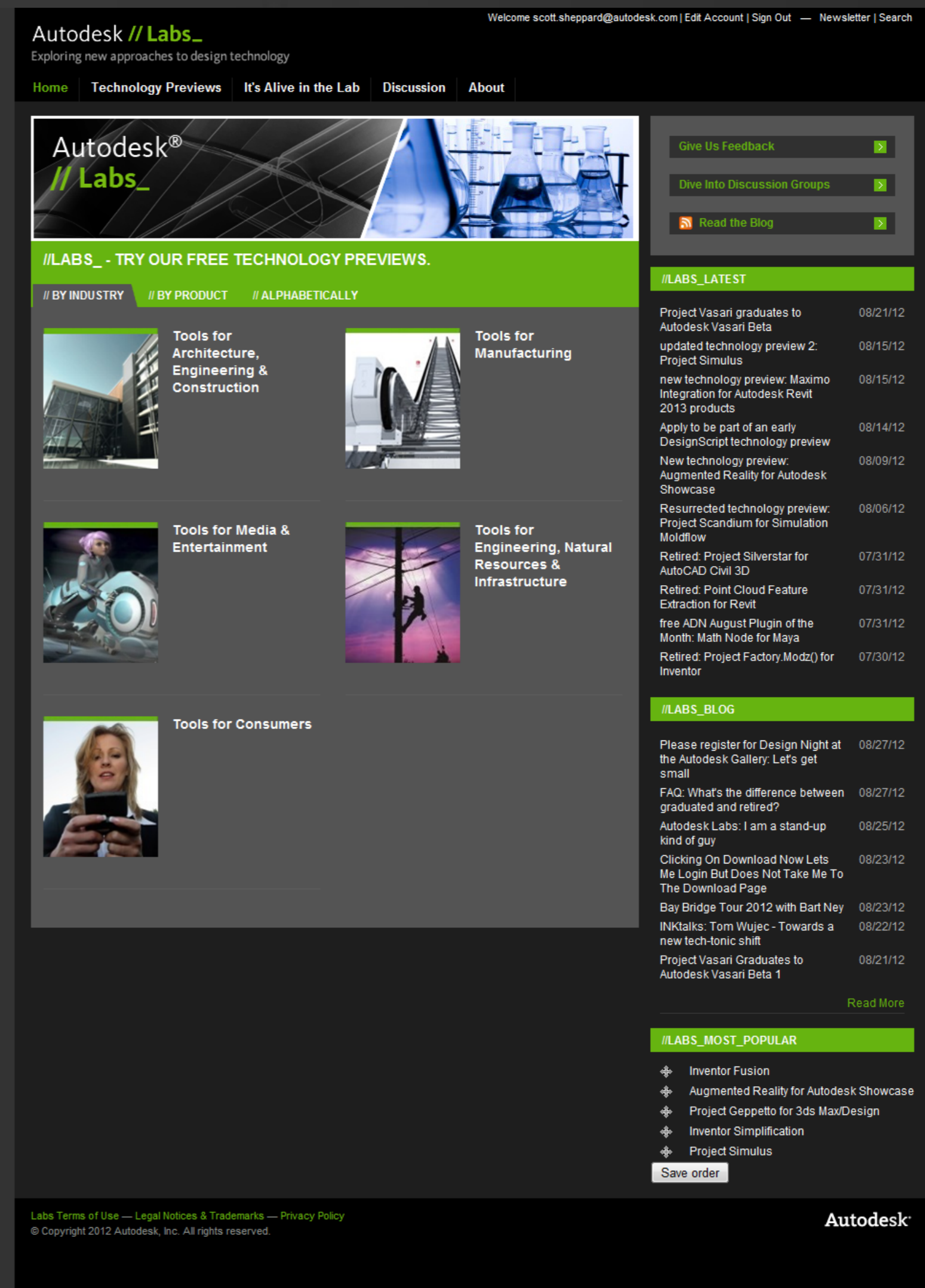
These statements are being made as of today, and we assume no obligation to update these forward-looking statements to reflect events that occur or circumstances that exist or change after the date on which they were made. If this presentation is reviewed after the date of its original publication, these statements may no longer contain current or accurate information.

I. The Purpose of Autodesk Labs

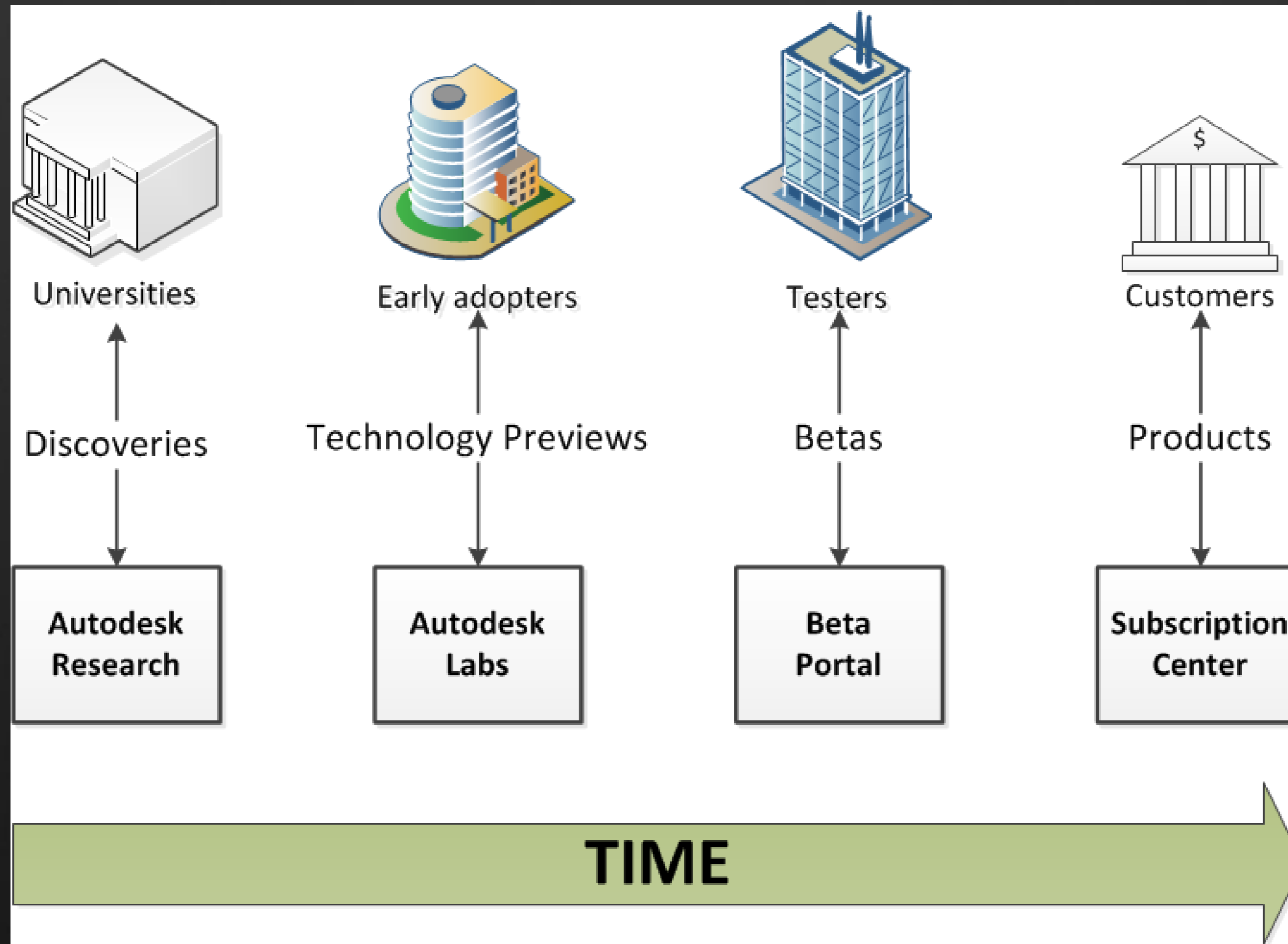
Autodesk® // Labs_



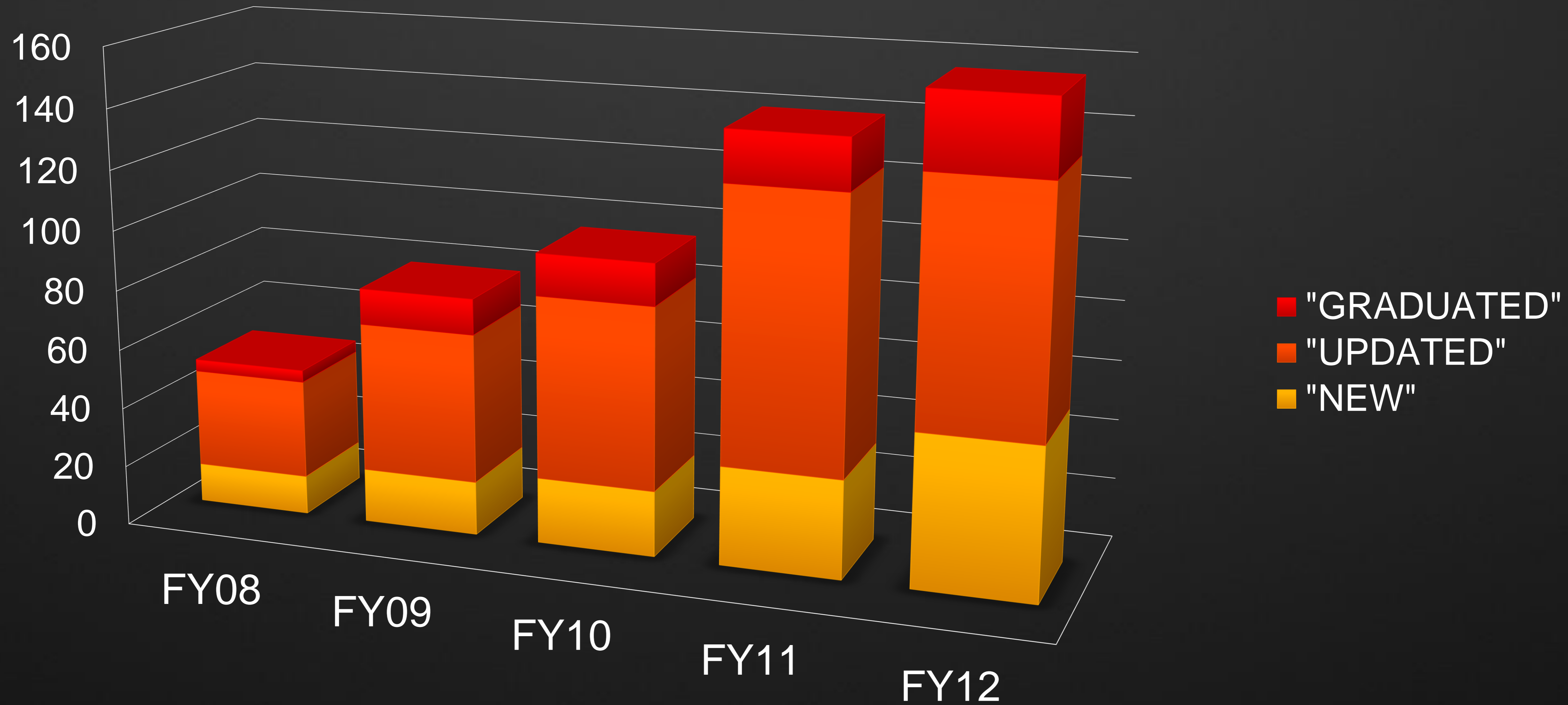
`http://labs.autodesk.com`



Our place in the world...



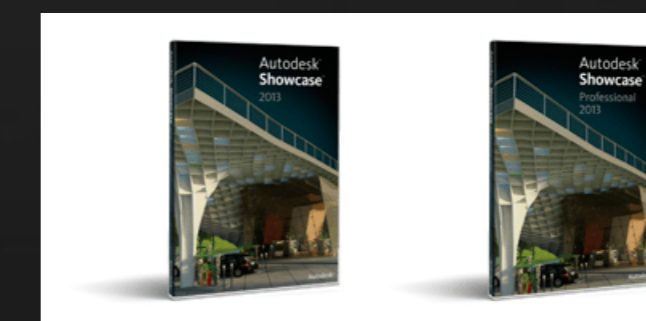
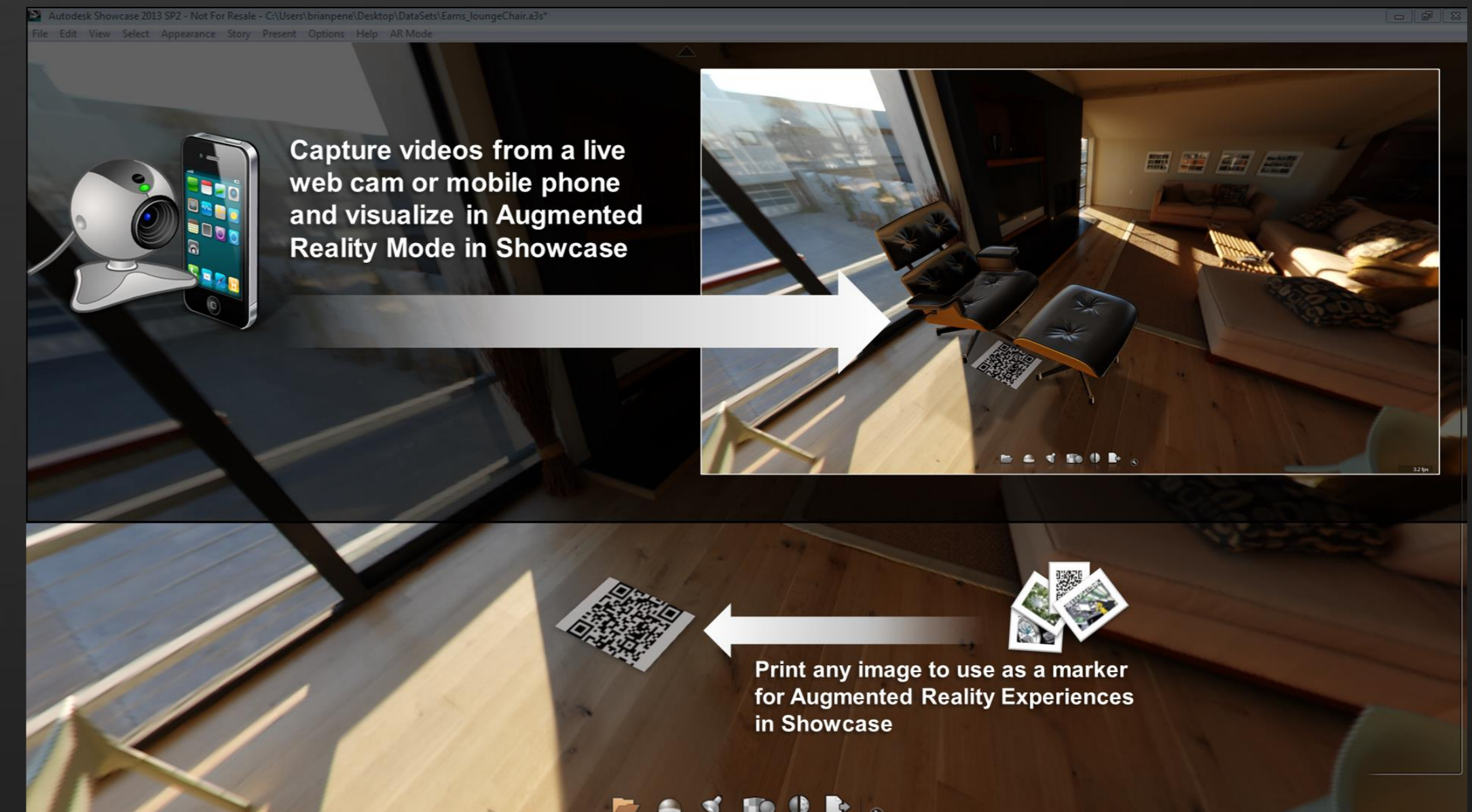
Technology Previews



II. Technology Previews You Can Try

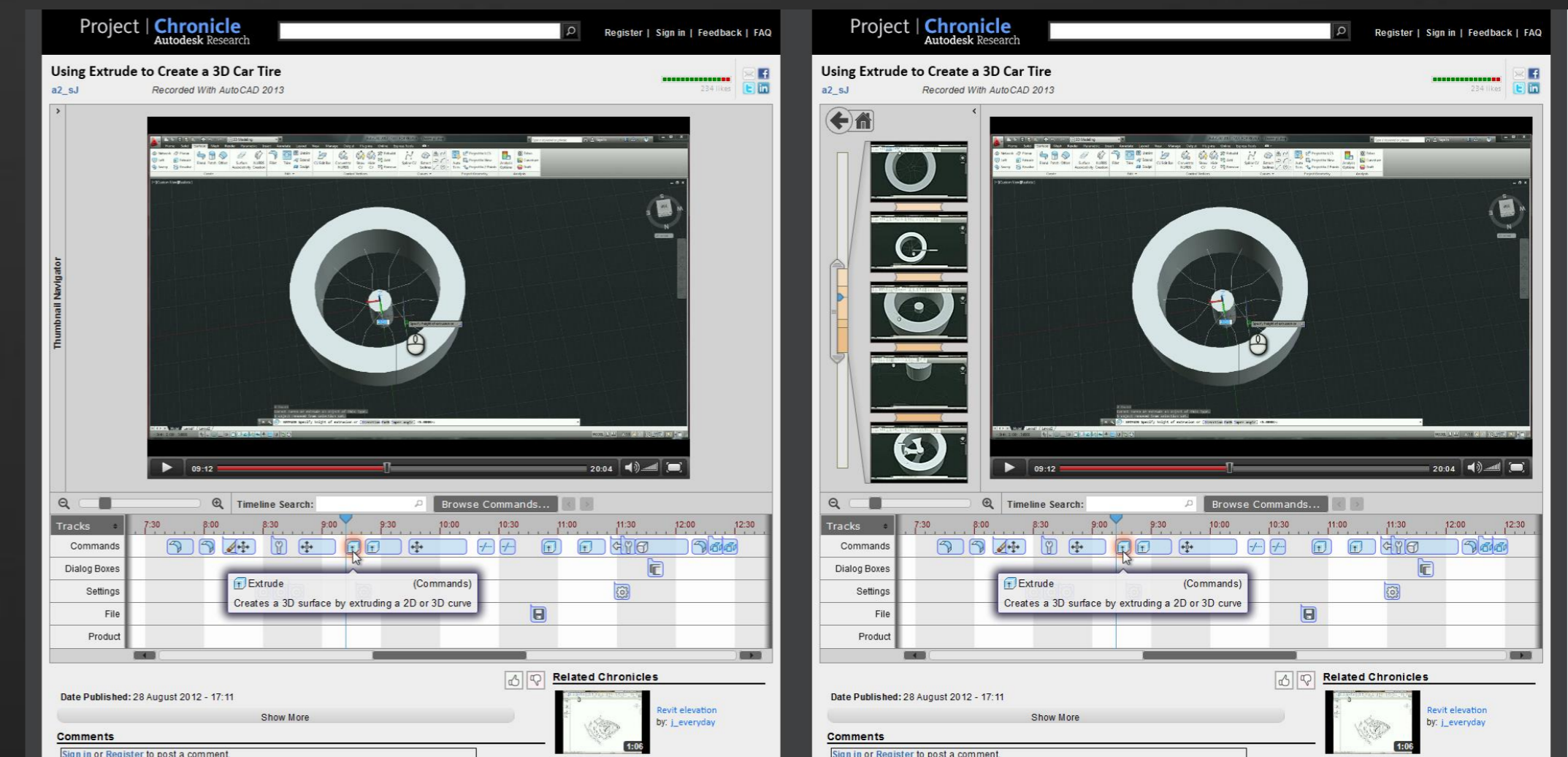
Augmented Reality for Showcase

- Overlay designs into live video
- Steps
 - Prepare virtual object
 - Associate marker (JPG)
 - Print marker (PDF)
 - Point web cam at printed marker
 - View augmented scene
- Import FBX (e.g., Maya)
- Until: January 31, 2013



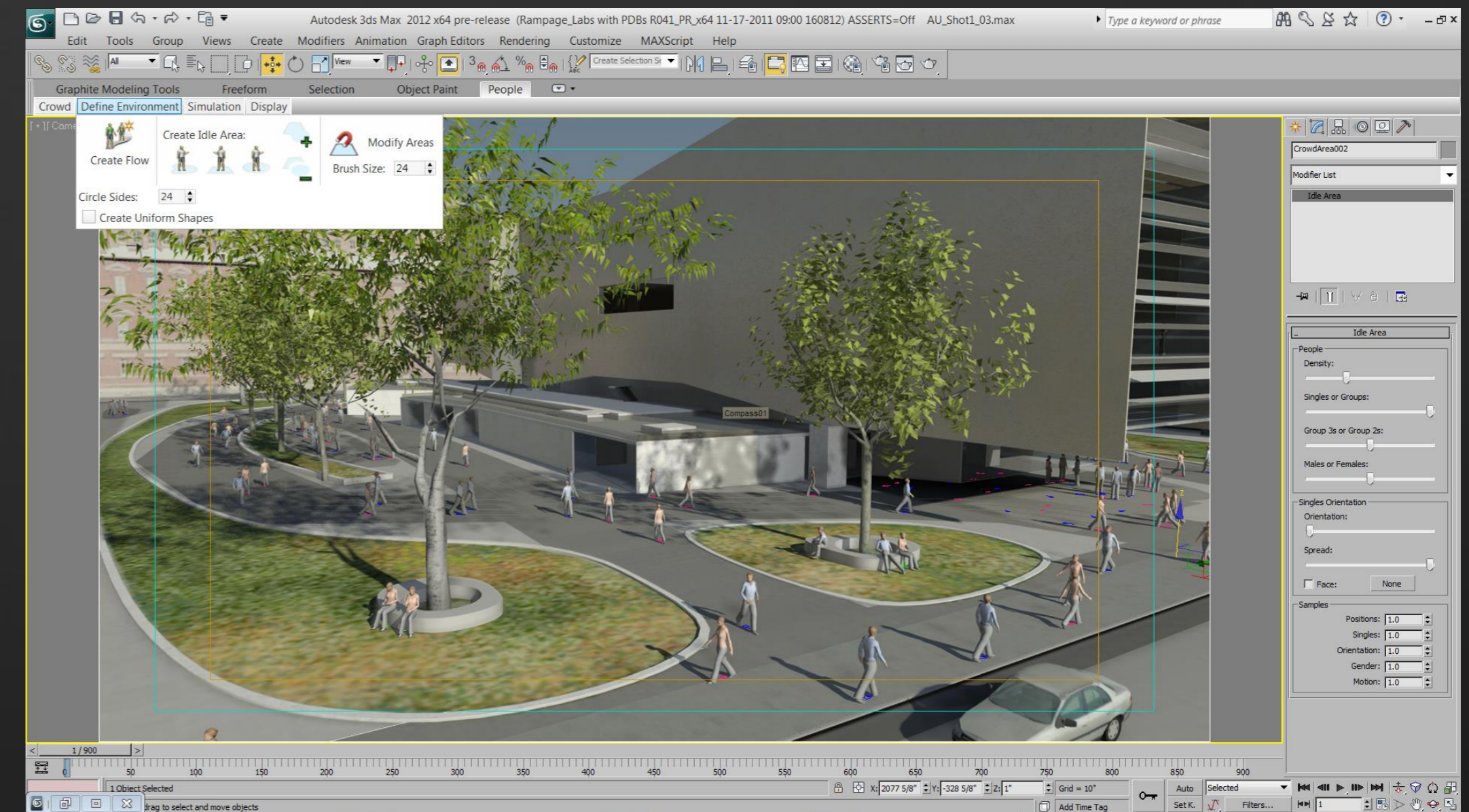
Project Chronicle

- Capture, share, learn
- Recording utility
 - Continuous video
 - Screen capture
 - Optional voice narration
 - Timing
 - Tools, settings, dialog boxes
- Upload to web server
- Others view annotated video



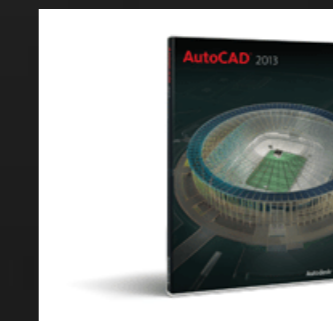
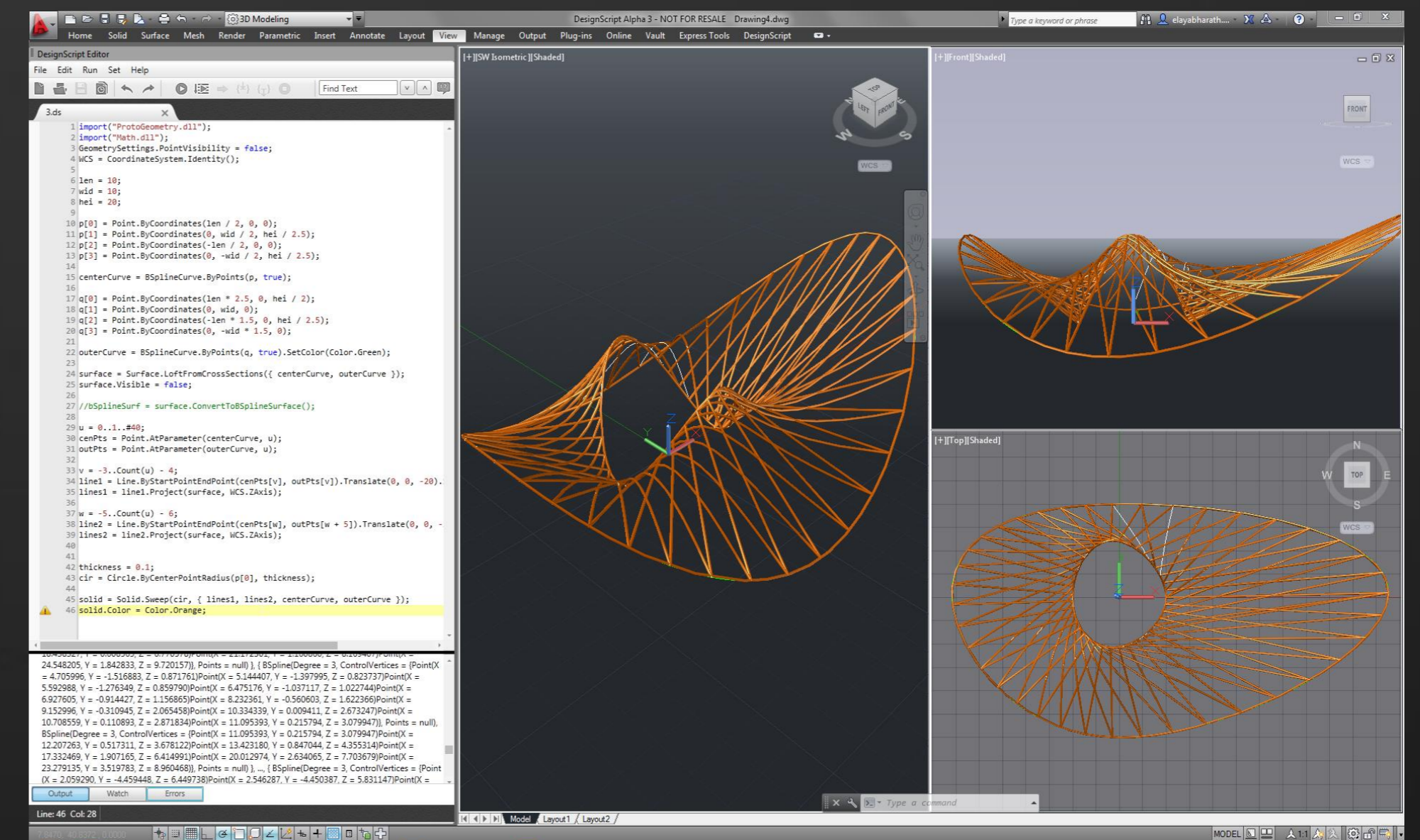
Project Geppetto for 3ds Max / 3ds Max Design

- Add crowds to 3ds Max scenes
- Features
 - Data-driven animation system
 - Plausible human motion
 - Geometric shapes and paths
- Includes
 - Sidewalks
 - Hallways
 - Lobbies
 - Plazas
- Until: January 15, 2013



DesignScript

- Scripting language
 - Exploratory programming
 - No experience
 - Integrated into application
- Features
 - Language
 - Interactive Development Environment
 - Geometry library
 - Analysis / simulation tools
- Until: March 31, 2013



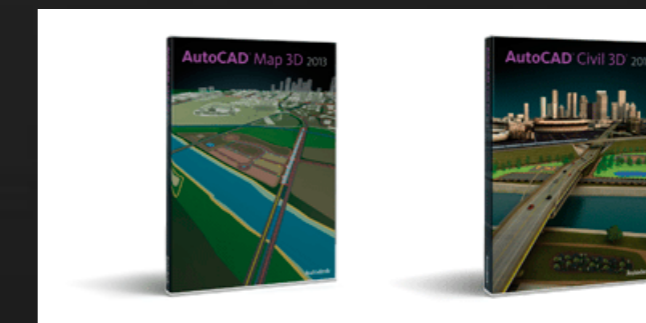
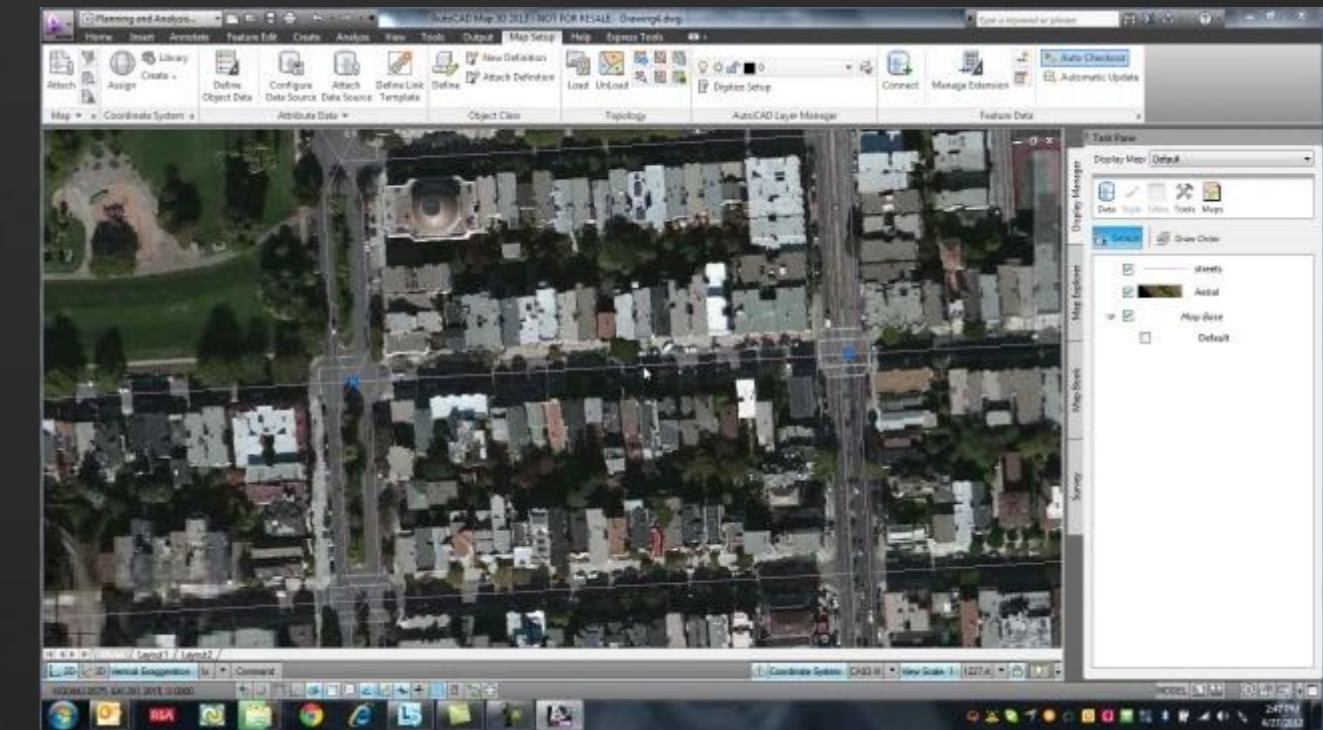
Project Factory.Modz() for Inventor

- Foundation
 - Physics-based
 - Artificial Intelligence (Kynapse)
- Features
 - Visually communicate intent
 - Animate movement
 - No CAD expertise
 - Drag and drop
 - Single-click workflow
- Until: February 28, 2013



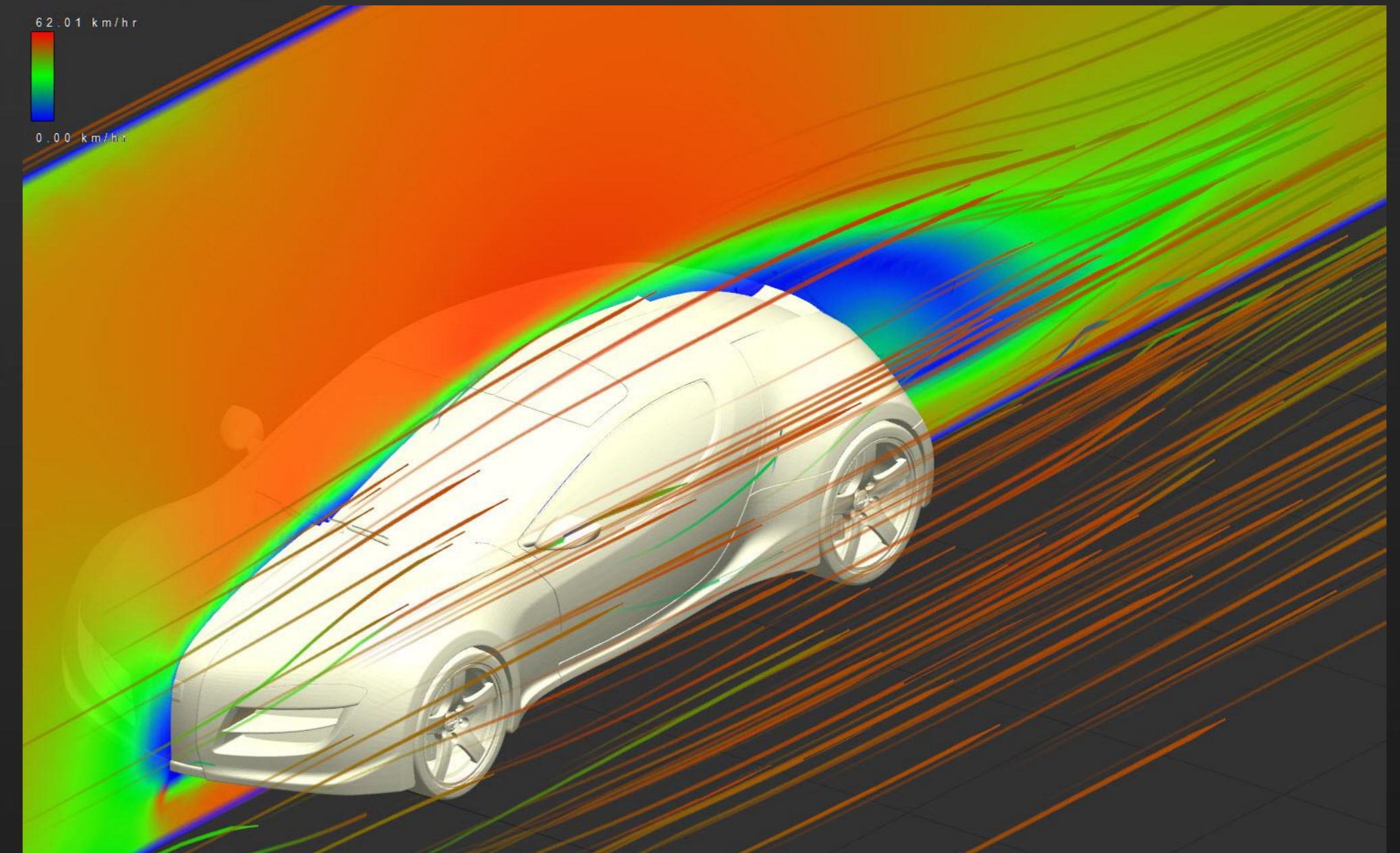
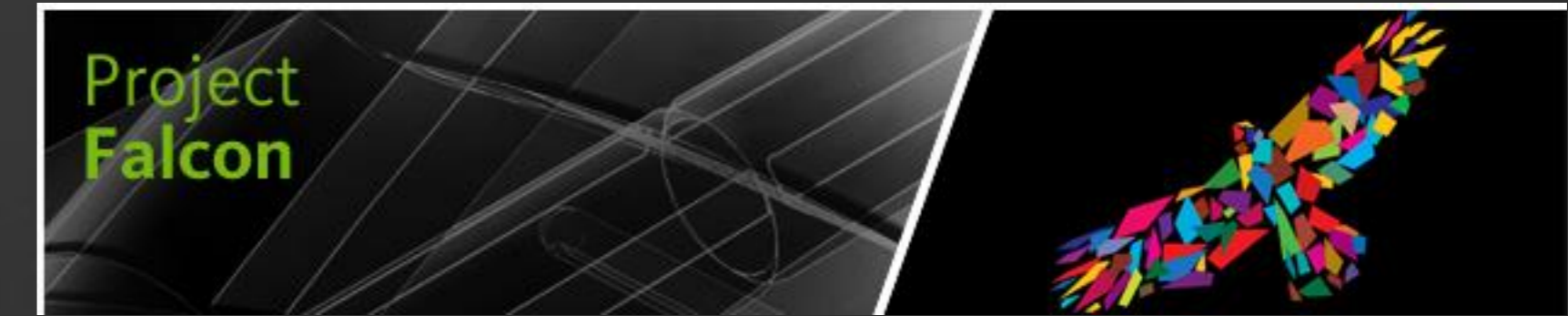
Project Basejump for AutoCAD Map 3D / Civil 3D

- Technology
 - No more Google Earth Extension
 - Microsoft® Bing® Mapping Service
- Steps
 - Open Map Workspace
 - Add data connection to Bing Mapping service
 - Select the data
 - Wait for data retrieval
 - Zoom to your project
- Until: August 12, 2013



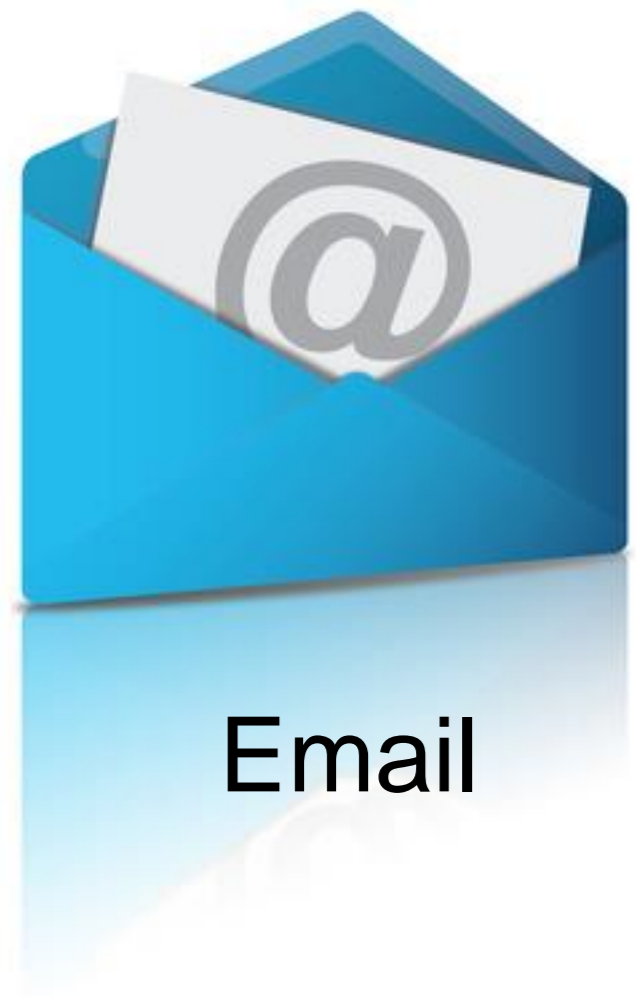
Project Falcon

- Forms
 - Alias Studio add-on
 - Stand-alone EXE
- Features
 - Wind tunnel simulator
 - Aerodynamic performance
 - Interactive – near real time
 - Flow and wind pressure
 - Wind-direction and speed
- Plans
 - Until: March 15, 2013
 - Follow-ons (Inventor /AutoCAD)



III. Providing Feedback

Traditional and Social Media



Email



Forum



Blog



Facebook



Twitter

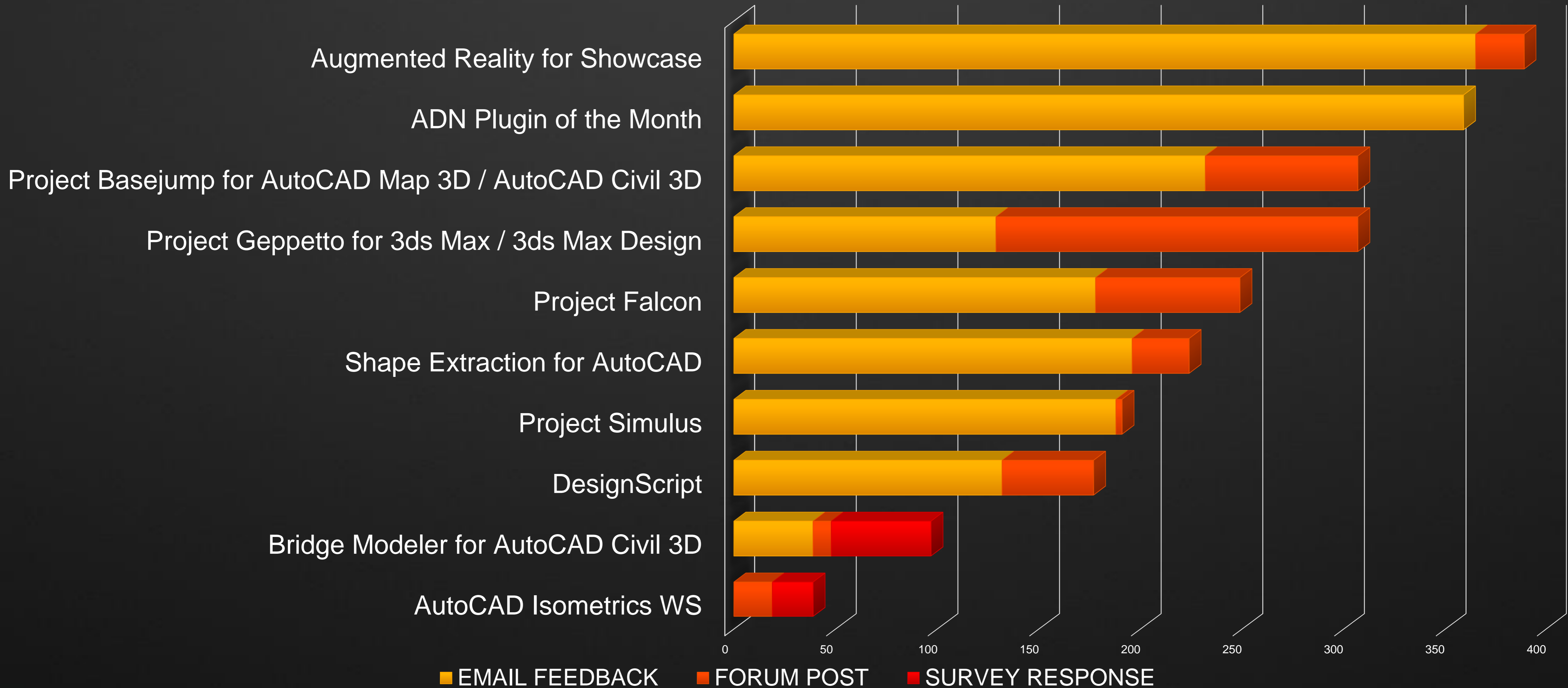


YouTube

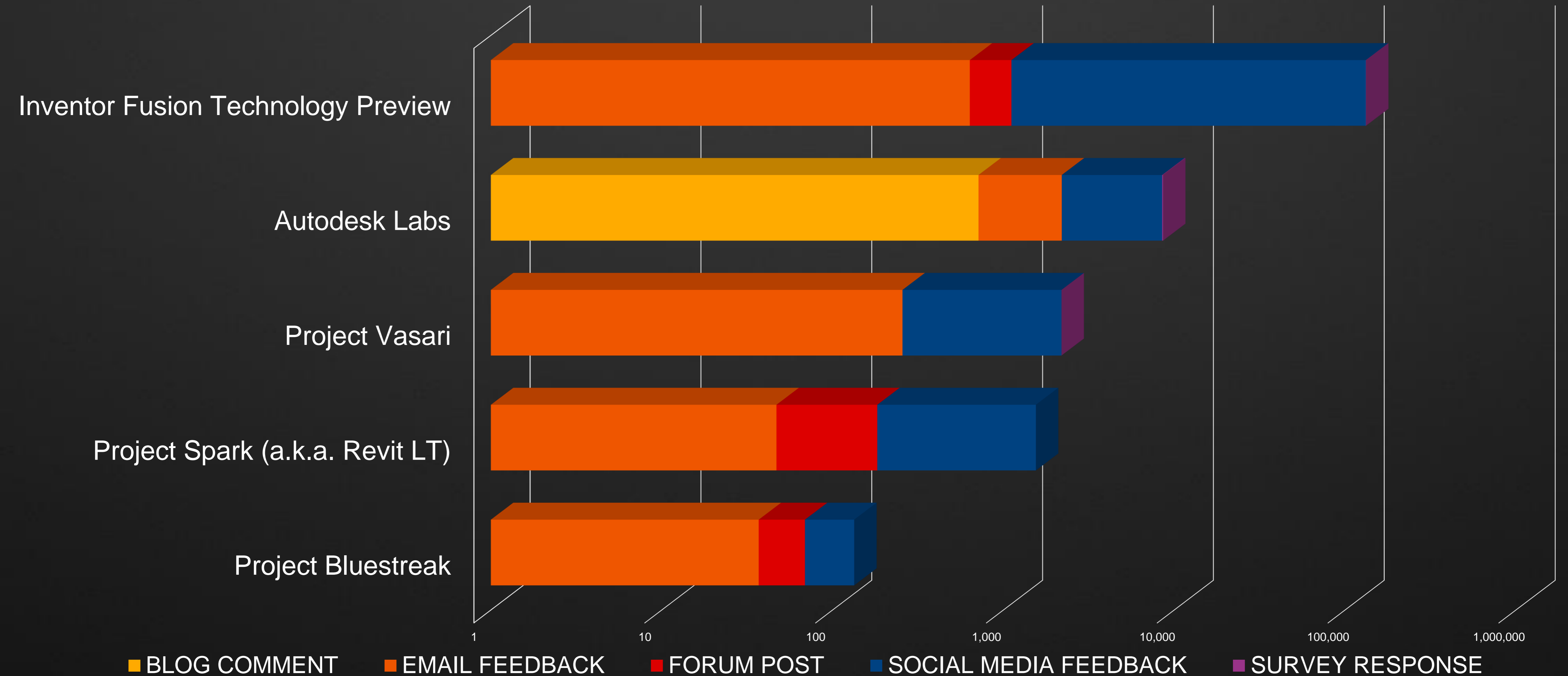


LinkedIn

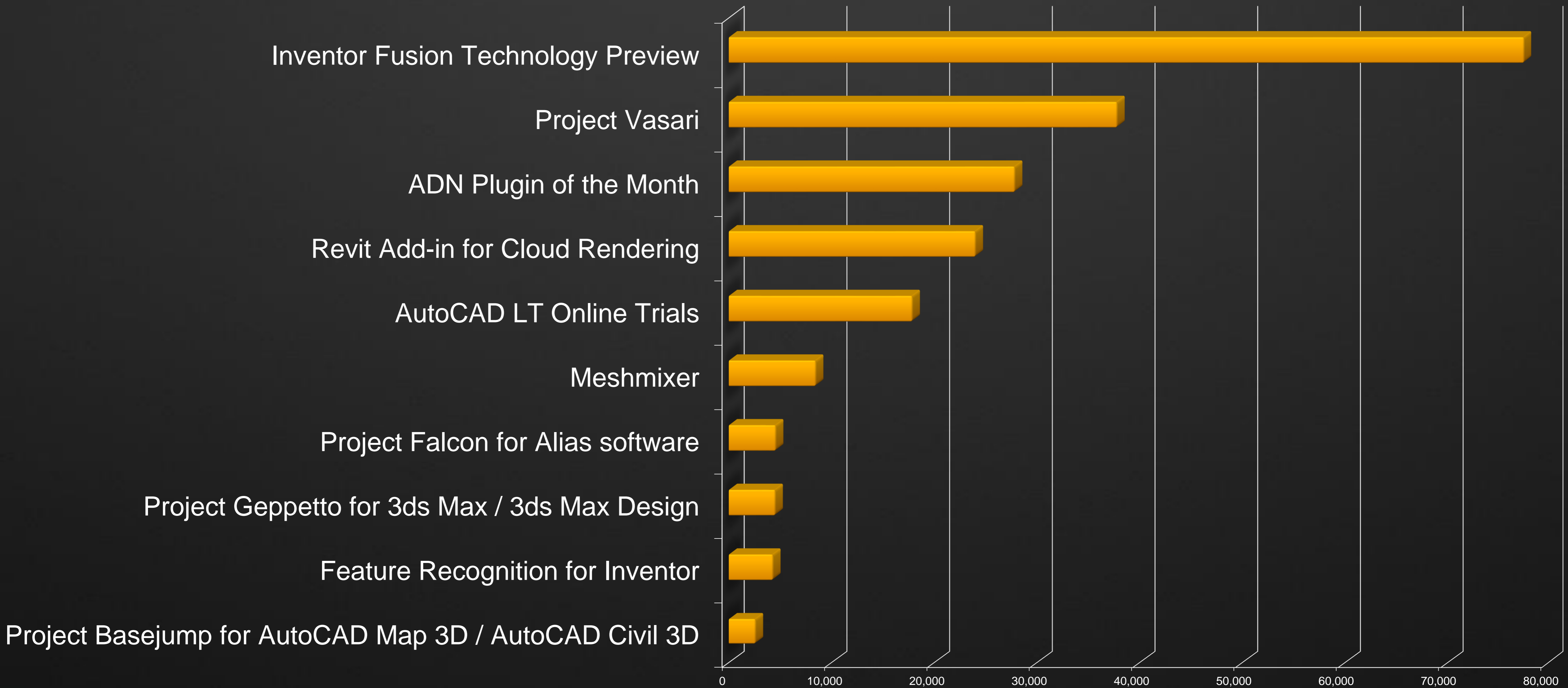
Feedback (traditional)



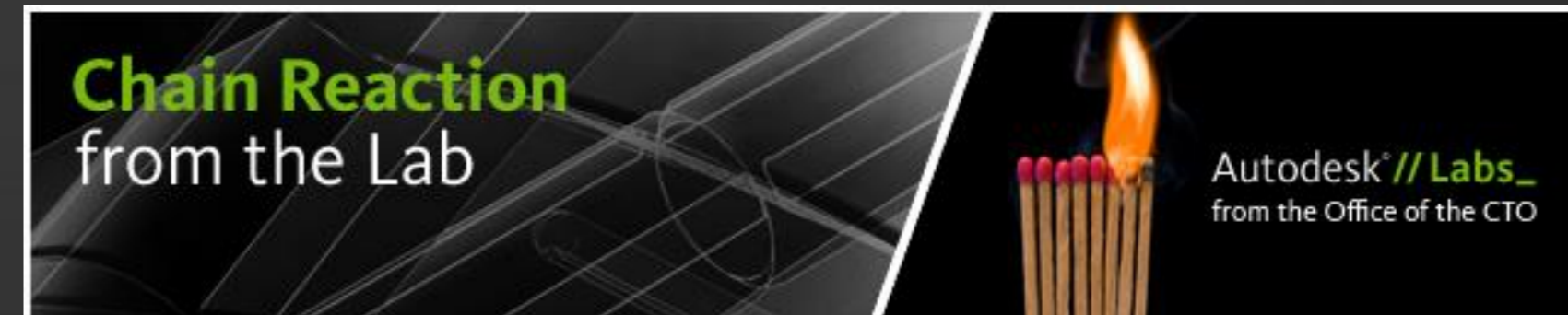
Feedback (social)



Downloads



- Recommendations



Chain Reaction from the Lab

Autodesk // Labs,
an incubator at Autodesk Inc.

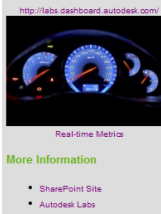
January 2012 MONTHLY TP3 Report

The internal research brings together technologies and utilities on Autodesk Labs for the past month. Autodesk Labs is one of the places where new ideas are explored, tested, refined, and shared. We're looking for ways to make the process as painless as possible and we hope you'll find it interesting to see what's going on behind the scenes.

Recommendations

- Nifty users in advance and redirect freshwired labs.autodesk.com visitors to the more robust and supported freshwired.audodesk.com. Shut down freshwired labs.autodesk.com servers.
- Rather than extend expired technology previews based on old technology, create new technology previews based on the Alice Labs technology as soon as practical.

Real-time Dashboard




Read-time links:

- SharePoint Site
- Autodesk Labs
- Betaface Beta Link
- ETX Alive in the Labs

Feednotes

- TP3 Report - Technology Preview Strategy: Recently you have seen the moving Office Space.
- Feedback includes comments posted for the single, meaningful projects for future releases to Lab technologies, email messages, and annotations on social media sites. The source includes the original feedback via "anonymous" interactions. The entire SPAAI message in the month.
- Feedback reflects the minority of users who have the infrastructure needed to connect an Active Mail to measure Labs activity is the number of downloads for software.
- As indicated by ShareCast, visitors are the number of unique visits for the month of service.

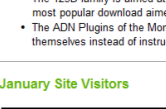
January Downloads



Project Name	Downloads
1. Autodesk 123D applications	~1200
2. Project Viewer	~1000
3. Autodesk AEC Plugins of the Month	~800

123D Catch has surpassed Google Earth Extension for AutoCAD as the most downloaded technology in Autodesk Labs history. The 123D family is aimed at consumers. Project Vassini is the most popular download aimed at professionals. The new ADI Plugins of the Month continue to be popular as utilities themselves instead of professional aids for would-be developers.


January Site Visitors



- Autodesk and Project Freshwired DWF viewing
- Project Freshwired // 123D Catch Beta (photogrammetry) to 3D models
- Project Chronicle mailing list // More to follow before you say

- TP3 REPORT: Autodesk Labs Project Photo / 123D Catch Beta for January 2012
- Use of Project and Autodesk Freshwired continue to be popular even though other Cloud-based solutions exist
- Project Photofly server usage continues to be moderate but will increase rapidly with the release of the mobile (iPhone/iPad) app
- Customers trying AutoCAD (and the CAX) continues to hover at ~3,000 sessions per month.

January Activity



Division	Activity Count
1. AEC	~150
2. P&ID	~120
3. MFG	~100

Detect on Labs Site FY12 Readtime needs

New

- Sold Out Surface for AutoCAD Civil 3D ADI Plugin of the Month // more
- Project Inspire for AutoCAD Map 3D // more
- Project Chronicle mailing list // more
- Point Cloud Feature Extraction for Revit // more

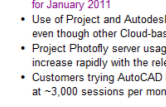
Updated

- Hosted Meshviewer 7.1 on Autodesk Labs download servers
- Project Scandum TP3 for Middle East // more
- Restored downloads of Project Vassini // more
- Hosted 123D Studio II (France, Germany, Simplified Chinese) update on Autodesk Labs download servers
- Scaphus 2.2 & ADI Plugins of the Month // more
- Hosted Meshviewer 7.2 on Autodesk Labs download servers
- Structure Generator for Revit // more
- Project Sleazebag for AutoCAD Civil 3D // more
- Parametric Solvers added for Project Vassini // more
- Automatically Update Export for Solar Radiation and Dynamo for Vector address // more
- Point Cloud Feature Extraction for Revit // more

Graduated

- None

January Feedback



- Most Fun for Joe Miller / Joe Mac Design
- Project Viewer
- Project Book

- Point Cloud Feature Extraction for Autodesk Revit users are excited about this technology preview. A 16T installation issue generated lots of chatter. The issue has been fixed.
- Potential Project Chronicle users below the technology preview will open up a lot of new thought.
- Project Gallery Online users provided great feedback on terrain elevation and contours.
- Feature Vaccination for Inventor users get clearly when the results are less than perfect.
- Project Vassini users miss the Planar Solar Radiation tool.

We've been fortunate to beginning to work with an outstanding existing technology and retaining new technologies on the Autodesk Labs web site. One of the ways the industry uses us as a "forward looking" company is to let the technologies and utilities we preview.

Notable Quotables

- "Similarly, it would be cool to use Project Gadgetto to be able to assign the people to Groups that also allow the controls to be used... you could automate the control. Let's say that a car collides with another car at one end of the simulation - the crowd nearest makes a set of reactions that is different than others who also witness the crash."
- Ian Nes
- "I think most of the time has been spent using Project Nucleus to adjust the material properties to get something close to wood. Trying to restrain my meshes enough to get them to rest where I want them, while still allowing them to conform to the physics, has been fun to figure out."
- Nick Demas
- "Firstly, I'd like to say what an exciting Project Falcon is, taking the difficulties of getting a quick and accurate insight into something that's been needed for a while."
- Anthony Bukowski

What's on Deck for February

- New Interactive Terrain Shaping for AutoCAD Civil 3D
- Retire Mesh Enabler for Inventor 2011
- Retire Shape Extraction for AutoCAD Civil 3D
- Retire Point Cloud Feature Extraction for AutoCAD Civil 3D
- New Level Generator for Revit ADI Plugin of the Month
- Retire Project Mouse
- New Rail Track Design for AutoCAD Civil 3D
- New 123D Catch (formerly known as Project Photofly) Mobile iPad 2 application
- Graduate Inventor Publisher Database to Social

Please send your comments and suggestions to Labs topics to chris@autodesklabs.com.

Read Time: ~10 min
Distribution: Autodesk Labs PAAM email alerts, various Autodesk Labs technology and utility email aliases.
Other: Available at the end of each month. Links at the previous month with results and key findings.
Why: Shows how Lab technology preview process is going and what would happen next.
To save email server space, you must be on the Autodesk newsletter or TP3B to see the images in this message. They are located on an internal server.

Bi-monthly Newsletter


- Innovation Edge
 - Opt in
 - 185,000 subscribers
- Content
 - 3 tech previews
 - Fewest words possible
 - Side bar
 - Blog postings
 - Recent updates
 - Social media

Innovation Edge

Autodesk // Labs from the Office of the CTO

February 2012

Welcome to *Innovation Edge* - an Autodesk Labs newsletter. This brief publication highlights technologies and utilities available on Autodesk Labs. Please give them a try. Your experience shapes the future of our technology.




Design parking lots, berms, swale, ponds, spillways, and more

[Video](#)
[Free Download!](#)

Interactive Terrain Shaping for AutoCAD Civil 3D

Develop grading proposals in AutoCAD® Civil 3D® 2012 software with purpose-built grading operations that interact with other grading objects, control over grading hierarchy and operations, direct analytical feedback including earthwork and stage-storage volumes, and extraction of solids and Civil 3D grid surfaces.




Convert point cloud data to BIM

[Video](#)
[Free Download!](#)

Point Cloud Feature Extraction for Autodesk Revit

Work with point clouds more easily in Autodesk® Revit® software with the ability to: Crop / Uncrop, Hide, Adjust Axis, and Extract datum, footprints, walls, and floors.



Create, store, view, and share isometric drawings in the Cloud

[Video](#)
[Try It!](#)

AutoCAD® Isometrics WS

Create, store, view, and collaborate on isometrics across multiple platforms - desktop, web, and mobile devices - with full DWG™ reliability and compatibility. For those who need to model pipes, let the Cloud do the computing for you.

Daily Blog

[Read the blog: It's Alive in the Lab](#)

- Tutorials Videos for Project Silverstar for AutoCAD Civil 3D Available
- Autodesk University Leadership Series
- February's free ADN Plugin of the Month: Level Generator for Revit Architecture Now Available

Recent Updates

- Project Scandium TP3 for Moldflow Insight
- Parametric Sliders, Automatically Update Export for Solar Radiation, and Dynamo addons for Project Vasari
- Project Silverstar for AutoCAD Civil 3D
- Structure Generator for Revit
- Project Inspire for AutoCAD Map 3D

Become a member

- Registration is free!
- Join the Labs community to shape the future of our technology.
- Subscribe to *Innovation Edge* for regular updates.
- Send to a friend.

Social Networking

Track Labs on:

- [Facebook](#)
- [Twitter](#)
- [LinkedIn](#)
- [YouTube](#)

* Free technology previews are subject to the terms and conditions of the end-user license and services agreement that accompanies download of the software.

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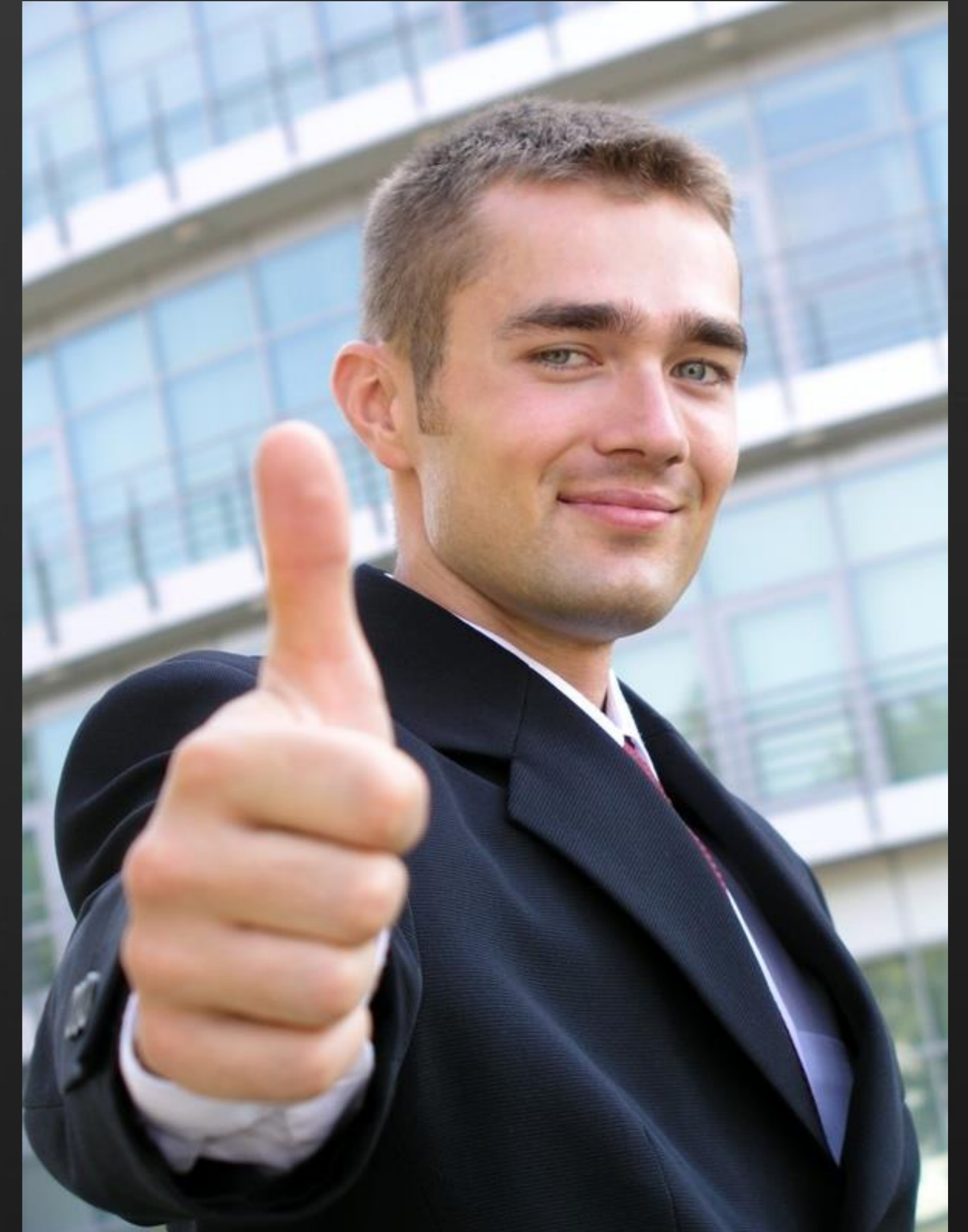
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QUESTIONS?

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