







# Engineers implementing PlanGrid and going through remote work

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# About the speaker

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I have been working for almost ten years as a mechanical engineer. In the last five years, I involved myself in the implementation of Revit and BIM in our company. Since 2015, I am a full-time BIM Manager and Revit specialist. I have worked on several projects as a BIM Manager and Model Manager, from 100 k\$ to 300 M\$. I oversee the elaboration of our internal Revit MEP and structural standard. I develop Dynamo scripts to improve model management efficiency. I handle training of our new users as well as honing the skills of our more seasoned modelers. I accomplish this by a mix of one to one sessions, training videos, online webinar and more formal classes, both in English and French. My experience with Revit lead Autodesk to invite me three times to “Inside the factory, Live!” (formerly “Gunslinger”). I have attended Autodesk University for the last three years as well. Since early 2016, I assist Autodesk’s developers team in their efforts to improve the MEP aspect of Revit.

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# Introduction

- Our take on PlanGrid, not official
- Engineering context
- A lot of small projects
- Internal use only
- Assumes you are familiar with PlanGrid

# Review – What's PlanGrid

- **Cloud based platform for site visits and inspection**
  - Drawings
  - Markups
  - Photos
  - Supporting documentation
- **Central location for construction drawings**
- **Used with iPads**
- **More than that, but that's how we use it**



# Our context

- Engineering company
- We mainly use PlanGrid for our building projects
- Our goal here is to have an efficient way to do site visits, not construction management
- Project size from single drawing to thousand
- Majority below 50 sheets
- Only EXP in PlanGrid

# Challenges

- **A lot of small projects**
  - Overhead needs to be faster than someone printing their documents and leaving the office
    - Project creation
      - Speed
      - Consistency
    - Project members management
      - If the designer cannot go on site, we need to be able to send someone else easily
- **Site reports creation needs to be very efficient**
  - If people simply use the iPads to take notes and then get back to the office to fill the normal form, this is a wasteful process
  - We still need to follow company standards in our documents
  - Language
- **Following our users**



# Project creation – Our solution

- **PlanGrid does not have a project template, but it allows to copy an existing project**
- **We created empty projects to be used as templates for each use group**
- **Users do not actually create new projects, they simply copy their template**
  - Quick
  - Naming scheme is in the name of the template
  - Members are copied with the template, so everyone from the team has access to all projects
  - Custom stamps can be copied
  - Report templates can be copied
  - Sheets can be copied
- **Project breakdown**
  - To keep the number of sheets per user down, each discipline has its own project on a given building (we split electrical and mechanical)

# Site reports – PlanGrid solution

- Since our client and the contractor are not in PlanGrid, we need to produce a PDF site visit report
- PlanGrid has a site report function
- This does not work for us
  - You walk around on site with the sheets and see a problem
    - You take notes
    - You take pictures
  - Once you are done with your visit, you need to create a new report, then manually bring in all your visit elements
  - No magic function to gather all your content
  - Too long for our needs
- **Demonstration**



# Site reports – Our solution

- **As you walk around, every time you see something you want to include in your report, you create a stamp or task**
- **You can take pictures associated with it**
- **You can write text**
  - Take your time to write this correctly the first time as this very text will be used in the report
- **When you walk by an older task, check if completed**
  - If so, mark it as completed
  - If not, you can comment on it
- **“Tasks” should not be seen as actual tasks, but more as site visit report entries**
- **Once your visit is done, you export the task list in PDF**
  - You can filter task by discipline if relevant
  - You should sort your task by status, but not filter them
  - PlanGrid does not allow for custom report
  - You can use your corporate report template as a cover page for the PDF
- **You can use custom stamps**
- **Demonstration**

## Site reports – Our solution

- **This workflow was developed by trial and error with site staff**
  - Do your own
- **We do not use the actual “Field Reports” function, except for continuous surveillance**
- **Problems**
  - Report export only in English
  - Export directly in PDF, no spell check
  - Picture orientation
  - Drawing markups are hard to include
  - No log of actual reports
    - Upload PDF reports in the “Documents” section



# Follow-up on users - Administration Console

- From a corporate point of view, we feel that PlanGrid is a very good tool that saves us money
- We want to make sure that when we give a license to an user, it gets used, and used properly
- The administrative console is our tool for this, but:
  - No view on total number of sheets per user
  - No view on personal projects
  - No view on external projects
  - No view of members activities
- This was a major roadblock for us
- Autodesk is creating a Power BI dashboard for us, but this is a custom solution
- Other solutions
  - Calling users
  - Exporting user list to Excel
    - Flagging users with no project
  - Using the export as mailing list to reach out to your users

# Impacts of working from home

- Staff suddenly does not have access to a plotter
- Staff suddenly does not have access to a scanner
- Staff begins to ask how to work in a paperless way
- It went from IT pushing on users to adopt PlanGrid to them asking for it
- All training is done on Microsoft Teams

# Deploiement – Wins and Fails

- **Wins**
  - Having a champion
  - Paperless because of Covid
  - Improving workflow by working with production team
  - Control with console
  - Project template
  - Uses of issues and export
- **Fails**
  - Lack of mentoring when giving licenses
  - Who needs a license?
  - Archiving projects

# Conclusion

- **Our keys to success**
  - Project templates
  - Good report workflows
  - Paperless
- **Use the console**
- **Mentor your users**
  - Teach workflows, not software





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