AS220143

BIM Workflows for Enhanced Results

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Learning Objectives

- Gain an evaluation of current workflows
- Learn how to identify potential gains from an adjustment to current workflows
- Learn how to develop an implementation plan for the adjustment
- Learn how to implement the change in workflow to enhance project goals

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Description

Attendees will gain an understanding of how to evaluate a team's current workflow to increase productivity and to exceed project goals while obtaining the benefits of a reduction in valuable resources (workload, schedule, costs, and construction resources). The session will highlight ways to build a foundation of current workflows, methods for identifying potential gains, development of an integration process, and processes for implementation. We will provide valuable insights from case studies, demonstrated improvements, and observable results. This class will not be software specific and will include examples from business workflows, design processes, project documentation, and development for construction management.

Speaker(s)

With over 25 years in the architectural and design industry, along with a decade of BIM workflow implementations, Joe provides a proven history of successful business process development. The projects he has worked on has involved teams of all sizes from just a few people to projects with thousands of team members located around the world. And the scope of his projects has been as small as timber-frame bus stop to a multiple world-class entertainment resorts.

Joe's experience includes work around the world in theme park/entertainment complex development, ride & attraction integrations, military facilities, primary education campuses, higher education institutions, detention centers, single and multi-family residences, historic preservation, and community development. His implementation and workflow development has been utilized in all the processes from preliminary design through facilities operations.

Evaluating current workflows.

The best way to make improvements to your organization's workflow is to evaluate what your teams are doing already. By stepping back and taking a look at the way you are currently doing things can help highlight inefficiencies. These may be in process, workflow, missing tools, or by adding supplemental features.

Changing demands and industry competition puts high demands on companies to show that they are the ideal candidate. As there are an infinite number of ways to do things, it is essential to evaluate and take the right path for your company to show how it is the best choice for the project. Review some of the things that your organization can be looking for to keep them on the "right track".

SO MANY CHOICES. WHICH ONE IS RIGHT?

Are the project's goals being met?

There are some essential goals for every type of project around the world, regardless of the firm type. The essentials would be meeting project schedule demands, maintaining budgeting goals, delivering a level of quality, and maintaining company standards.

Meet the project benchmarks on schedule

Your team needs to strive to meet each milestone deadline. This means that the project team is on a path that is full steam forward to drive the project along. Be aware of project staffing, improper realizations on staff capabilities, and insufficient planning for the project as a whole.

Keep the project within the budgetary goals

It is important to remember that while some project goals are set by individual teams, they are often inherited by other departments, or implicitly by senior management. Refinements to workflows can help minimize the amount of time invested on work efforts helping in both schedule and budget values.

Have your work represent the quality that your firm values
Unfortunately, as a project starts to fall behind in it's goals, one of the areas that is sacrificed is quality. Less effort is invested into accuracy, omissions occur, and changes are not carried throughout a project. Don't let a poor representation of the firms abilities cause a lack of future work.

Ensure the proper utilization of resources.
Investigate what you have, and determine if you are getting it's full value. That means checking a lot of things…

- Time sheets & workloads: of course, we hope that our employees are being honest about their commitment to the company, but they may be spread across more tasks than what is realized. Communicate with your team to ensure that the work that is being completed is what is expected.
- Improve project planning: if you don't have a plan, your utilization and production efforts do not represent the status of the business, your current workload and the effectiveness of the team.
- Productive work environment: by creating an atmosphere where employees can share ideas, tap into each other's knowledge, collaborate efficiently, and reduce the impact of missing resources by know what is available among the team. A positive environment also helps with the team wanting to increase productivity in the group's workflows.

Does the work seem to take too long?

How many people are doing the same exact thing?

Is the data useful?

Sometimes the delays in the work process could be similar to what makes your day feel long at the office. Feel free to try these as it relates to both BIM efforts and office advantages.

- *Organize your environment.* Having things in a clean working order helps reduce time looking for things, keeps your information moving fluidly and, as a nice side bonus, keep you looking professional and busy (great for your boss to notice).

    From a BIM Workflow point of view this can be things like:

    o Cleaning up the directory structure
    o Diving models into usable files (core & shell separate from interiors)
    o Populating your models with the correct data values (manufacturer, model number, etc.)
    o Assigning correct and consistent Object Styles and/or property types

- o Removing excess materials and categories that are not purged from your content.
- o Reducing model errors and alerts in the Revit software.

- ***Don't feel guilty about taking time for your needs***. Often by cleaning up and improving the way you perform your work can benefit your organization more than you may anticipate. The improvement of your workflows allows you more time to assist your project teams.

- ***Remember to plan ahead.*** It is much more effective to be proactive than reactive. Your leadership will see your preventative and proactive efforts as your determination for success as a leader. By being reactive you become a "savior" to the company and are an invaluable resource… but you are also un-promotable.

- ***Narrow your focus on the service you are providing.*** You are leading a group of people, supporting another group, specializing in a specialty service, providing a marketing value, assisting in production efforts, resolving technical issues, evaluating new technologies, integrating with other company technologies, training staff, developing workflows, producing technical documents and guidelines along with numerous other tasks not mentioned. Make sure that you are completing your projects in a complete and finished product. Leaving open ends only causes you more work in the end, under more pressure.
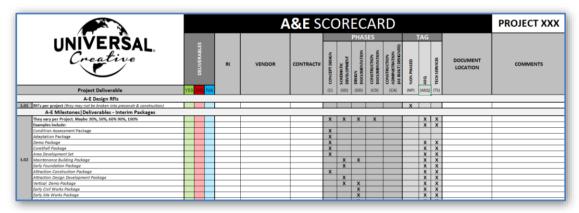
- ***Set a goal and reward***. This is something that I learned from helping my day go along more quickly. I would set a series of tasks to do for the day, and if I finished before heading home, I rewarded myself with dessert after dinner. I know it seems a little odd, but it can be a great motivator when you get home and the family is eating their ice cream in front of you. ☺

Is the work being done, or just finished?

One of the things that I hate is when works just get to a point and give up. Adjusting your workflows and creating official stopping points that mark when a project is complete. By creating a checklist that includes what is to be received physically and electronically. This includes what content should be in the drawings, what content should be in the BIM files, and the Level of Development (LoD) that should be obtained at each milestone submittal.

Not only does this process help in meeting official project deadlines, it helps provide a baseline for project financials to ensure proper payment for provided work.

Identify the potential gains

By reviewing and following some of the tips above the benefits for you and your team can be quite extensive. Just for example:

- Overall team efficiency

- Increased team attitude

- Effective resource allocation

- Removal of unnecessary steps and processes

- Assignment to specialized tasks to dedicated staff

- Proactive process of eliminating errors versus a reactionary process of repairs

- Management has the ability to lead the process within the company versus needing to direct each individual action.

- A reduction in administrative tasks needed to validate completed work.

Development of an Implementation Plan

It is essential to develop an Implementation Plan for proper deployment of ideas to save management time, money and most of all, frustration. To help convey the goal of your plan there are some essential points to explain in your Implementation Plan…

- Project Overview
- Scope
- Objectives
- General Requirements
- Assumptions

- Constraints
- Schedule
- Cost
- Roles and responsibilities
- Risk management

Conclusion

I hope that this reference document helps you in your evaluation and development of workflows to help address your firm's current workflows. As this document is not intended to be a standalone resource, review the recordings available at Autodesk University Online.