

5 Tips for the Modern VDC Manager

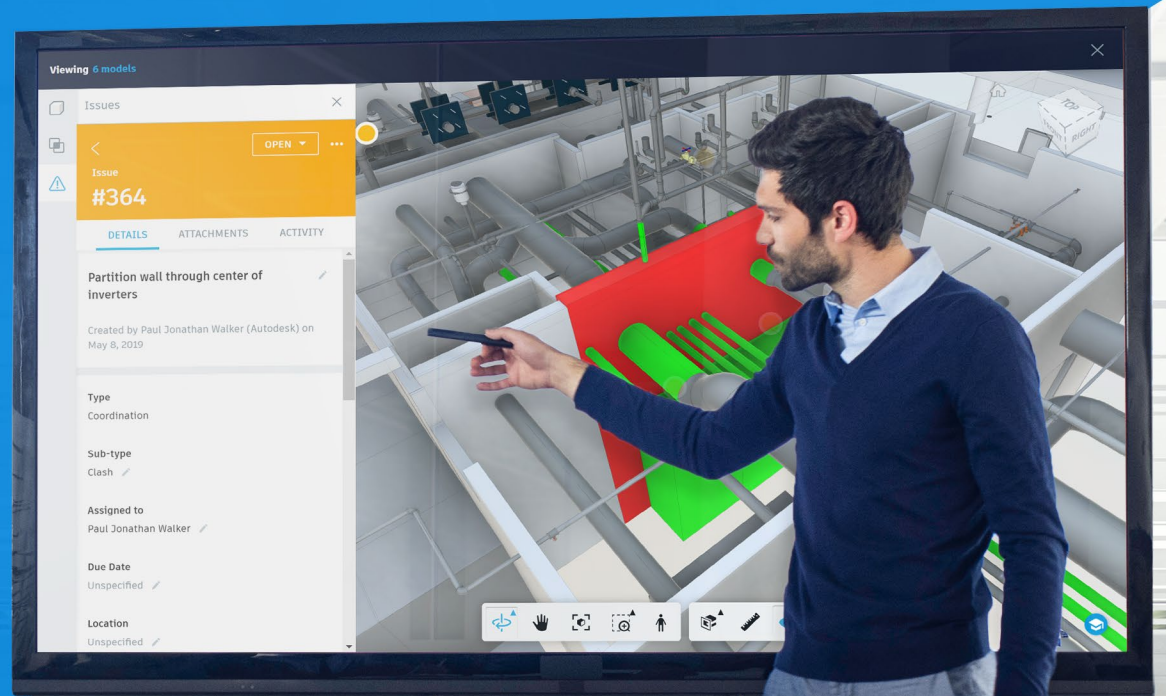


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Introduction

The job title “VDC Manager” (sometimes referred to as “BIM Manager”) has been present in the construction industry for at least a decade, but even today, VDC Managers with the same title can find themselves fulfilling wildly different roles. In fact, many organisations considering bringing on a VDC Manager don’t have a clear understanding of the role’s scope or the resources required to perform the job effectively.

The ambiguity surrounding this role in construction organisations can make life difficult for the modern VDC Manager. In this guide, we’ll explore a few key questions facing VDC Managers today, including:

1. How is the role of the VDC Manager adapting and expanding in today’s industry?
2. How can you enhance the level of product support across your organisation?
3. How can you implement and manage a VDC support team?
4. What are the best ways to source supporting roles (like VDC Coordinators)?
5. How can you streamline daily tasks and gain more time for innovation?

Let’s dive in.







TIP #1

Know How to Communicate Your Role

Almost every VDC Manager has been asked at some point, by staff ranging from junior architects to directors, 'So, what do you actually do?' The role consists of such a wide array of tasks that it can be a difficult question to answer in a concise way.

For instance, a VDC Manager might say something like: *'I lead and support the use of digital technology on construction projects'*.

A response like this gives people a vague idea of the role, but it doesn't truly reflect the scope of the job. On any given day, a VDC Manager can find themselves bouncing between tasks related to project support, teaching, IT, quality control, coding, and more.

The variety and volume of tasks can make keeping track of work difficult, even for experienced VDC Managers. VDC Managers who are feeling overwhelmed can benefit from aggregating all their day-to-day support tasks and categorising them into components. Having tasks documented is not only a useful tool for effectively communicating the VDC management role within your organisation, but it can also help the VDC Manager plan and resource initiatives within those areas.

Having everything on a single page also gives surprising clarity to the bigger picture and reduces the feeling of being overwhelmed by the sheer number of things that need to be fixed, implemented, or developed.

TIP #2

Form a VDC Support Team

During the planning phase of a construction project, there are many tasks involved in exchanging information between teams (such as preparing, issuing, and receiving models weekly) that require quite a bit of time and specialised knowledge. To compensate for this, teams of dedicated BIM experts, called VDC Coordinators, are slowly becoming more common in construction practices today.

In comparison to a VDC Manager, who manages the VDC support team and the overall BIM strategy within the organisation, a VDC Coordinator is dedicated to specific projects as a resource and works closely with the project team both internally and externally. By working closely on specific projects, the VDC Coordinator can establish a strong knowledge of the project deliverables and the design.

Below is an example of the typical project tasks of a VDC Coordinator at a main contractor:

- Project Model Setup
- Issue/Receive Models
- Consultant Engagement
- Co-ordination/Clash Detection
- Advanced Modelling
- Model Auditing plus Repairs
- 4D Scheduling/Timeline Creation
- Content Creation
- Drawing/Schedule Management
- Data Extraction
- Knowledge Transfer

Making a Business Case for a VDC Support Team

The biggest challenge facing VDC Managers at most organisations revolves around convincing management to invest in new staff, particularly in roles that didn't previously exist on the payroll. To make an effective business case for the need, the VDC Manager will need to gather support within the organisation.

The VDC manager should:

- Identify shortfalls and knowledge gaps. *Demonstrate training requirements that can't be met without sufficient quality assurance on models being shared.*
- Identify value and need. *Demonstrate the opportunities for winning work, ability to tender for projects with mandatory VDC requirements, and forming good relationships with consultants.*

- Identify a management representative. *Find a member of the senior leadership group to back your proposal. There's usually someone who is supportive of the importance of technology. It's also a great opportunity for that leader to acquire responsibility for overseeing technology in the practice.*
- Identify projects in the pipeline. *Determine which upcoming projects will require a significantly higher level of digital delivery, and that can immediately justify the resourcing of a new VDC Coordinator.*

Often, it simply comes down to risk versus reward. It may only take the appointment of the first VDC Coordinator to establish a proof of concept and the confidence from management to expand the resource across all projects.



TIP #3

Resource and Structure Your VDC Support Team

Your approach to resourcing new talent is a critical element in justifying the need for a VDC support team within the organisation. The VDC Coordinators (as well as the VDC Manager) need to be able to clearly demonstrate the value of their output.

Determining the client's contractual VDC requirements on projects is an excellent opportunity to establish a need for resourcing. These requirements can sometimes be misunderstood or ignored by project leaders, but if intercepted by the VDC Manager, it provides the opportunity to advise the team on potential risks and determine deliverables that will require specific tasks or specialised knowledge.

VDC Managers should strive to be a part of the leadership group and attend weekly resourcing meetings. This forum informs the VDC Manager on incoming projects and allows them to advise the leadership group on the specific skills, knowledge, and support required by the team.

Below is a simple pipeline example for resourcing project VDC support:

1. VDC Manager determines project requirements.
2. VDC Manager establishes project environment and BEP.
3. Project is supported by VDC Manager or handed off to suitable VDC Coordinator.



Resourcing the VDC Coordinator

Knowledge transfer is one of the key priorities and benefits of the VDC Coordinator role. This person works closely with the extended team and imparts their knowledge; that means you'll want to look for people who enjoy teaching others and have the communication skills to work with a wide variety of personality types.

When seeking someone for the role, you should look for:

- Someone who is proactive in identifying issues and problem solving
- Someone who seeks full understanding and is always looking for better ways to do things
- Someone who can find balance between adhering to standards and having flexibility to best serve the interests of the project team
- Someone who is always willing to learn new things
- Someone with a positive attitude.

Effective VDC personnel are tech-savvy problem solvers. They're most valuable when they help solve complex co-ordination problems that impact constructability on site. However, most VDC Coordinators' days are spent performing manual tasks like detecting small clashes and creating notes for meetings. Many of these tasks can be automated by software, and employing such software ensures VDC Coordinators spend more time on valuable, specialised work. Providing access to the latest technology is a vital element of hiring and retaining top talent.

Many of the top main contractors also reserve one day a week of R&D where VDC Coordinators can engage and develop a chosen personal area of interest or new initiative. This provides a good opportunity to develop new ideas and work closely with the VDC Manager on implementing new technology that is not directly project specific. It also provides a time buffer when projects suddenly require a little extra help.

TIP #4

Provide and Enhance Product Support

Depending on where you work in the world or who your clients are, you may have some projects with complex requirements for VDC, and some with little to no requirements at all. Both examples need to be resourced differently, so it's good to have a process in place to help determine what to do.

Define a Standard Scope

A good place to start is to define a baseline for how the project will be delivered, regardless of whether VDC is a requirement.

- Authoring Platform (Revit)
- Co-ordination Platform (Navisworks, BIM 360 Glue, BIM 360 Model Coordination)
- Quantification (Assemble)
- Model Exchange Format (RVT, NWD, IFC)
- Document Exchange Format (PDF)
- Geometric Level of Detail (blanket statement – sufficient for drawing production and 3D coordination)
- Embedded Data (blanket statement – sufficient for scheduling/specification)

As an organisation, you can then establish that a base level of VDC on every project and will require X amount of support (e.g. 1 VDC Coordinator @ 40%). If additional VDC requirements are added to this, the level of support can increase to 60-80-100% to meet the demand of the project. This may include items such as:

- Your organisation is appointed to lead the coordination process.
- Data input for asset management.
- Preparing the model for sustainability analysis.
- Preparing the model for DfMA purposes.

By figuring out the amount of support required for each project, your organisation can work with you to ensure you have the resources and time required to provide the necessary deliverables.

Create a Knowledge Base

We've already talked about some of the many tasks that a VDC Manager needs to juggle in order to create a thriving VDC environment within their organisation. However, there's still an additional duty that is generally the most time consuming of all: product support.

For example, given the complex nature of the tools need to perform model coordination, it can take a long time for new users to learn how to use them. It's up to the VDC Manager, who is likely to be the person most familiar with the tools at any given company, to serve as the point person for the entire co-ordination process.

Creating a knowledge base allows new users to explore and learn about new software without much supervision. A knowledge base can include frequently asked questions about the different tools and platforms they support, as well as the training and onboarding materials needed to get VDC Coordinators and project partners up to speed.

Putting together a knowledge base sounds daunting but can be quite simple. Many product-specific resources are up on YouTube, so it can be a matter of curating a small library of YouTube links.

With a knowledge base, you'll be able to save time performing tech support and empower your team to learn about the products and fix issues on their own.



TIP #5

Streamline Processes

As a VDC Manager, understanding the modeling activity on every single project can be a very time-consuming task. Thankfully, many of these tasks can easily be streamlined or automated.

Support Requests

Keeping track of every single question or request can be challenging when constantly being pulled in several directions. Requests can come in the form of emails, instant messages, phone calls, or speaking in person, so it's often easy to forget something if it's not all written down.

One way to consolidate requests is to establish a VDC support mailbox that is shared by the support team. Encouraging teams to use this channel will help ensure requests are recorded, allocated, and tracked. Sharing the mailbox with the VDC team also helps the VDC Manager gain a broader view on what types of support issues are happening on projects. It also means that when a support team member is away, someone else can cover their project's support requests.

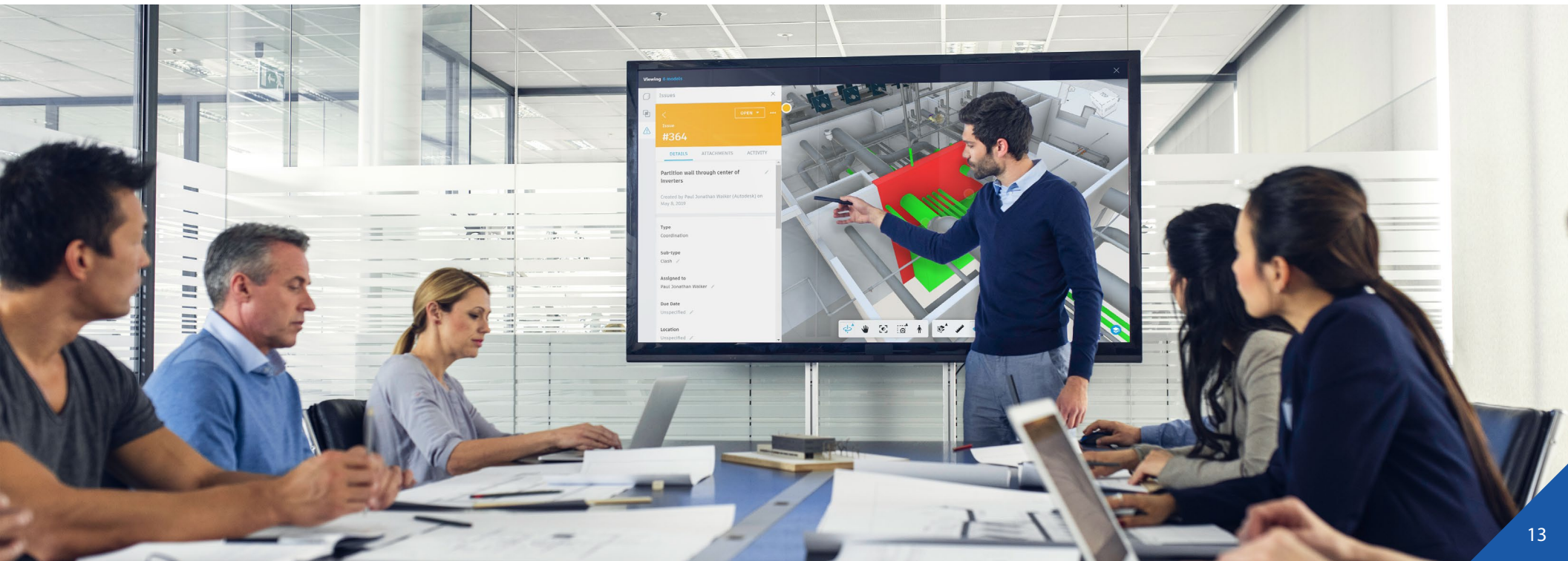
Also, using a platform where all issues related to a project can be tracked and responded to—like BIM 360—can keep all communication in one place and save the VDC team a lot of time when supporting other project stakeholders.



Conclusion

Today, the traditional VDC management role is adapting and expanding. That's why it's become vital to implement and manage a design technology support team in your organisation and enhance the level of support provided to your users.

By implementing these proven strategies, you can enhance productivity, decrease the risk of software failure time loss, and help users get the most out of their software in both the local office and across a global organisation.

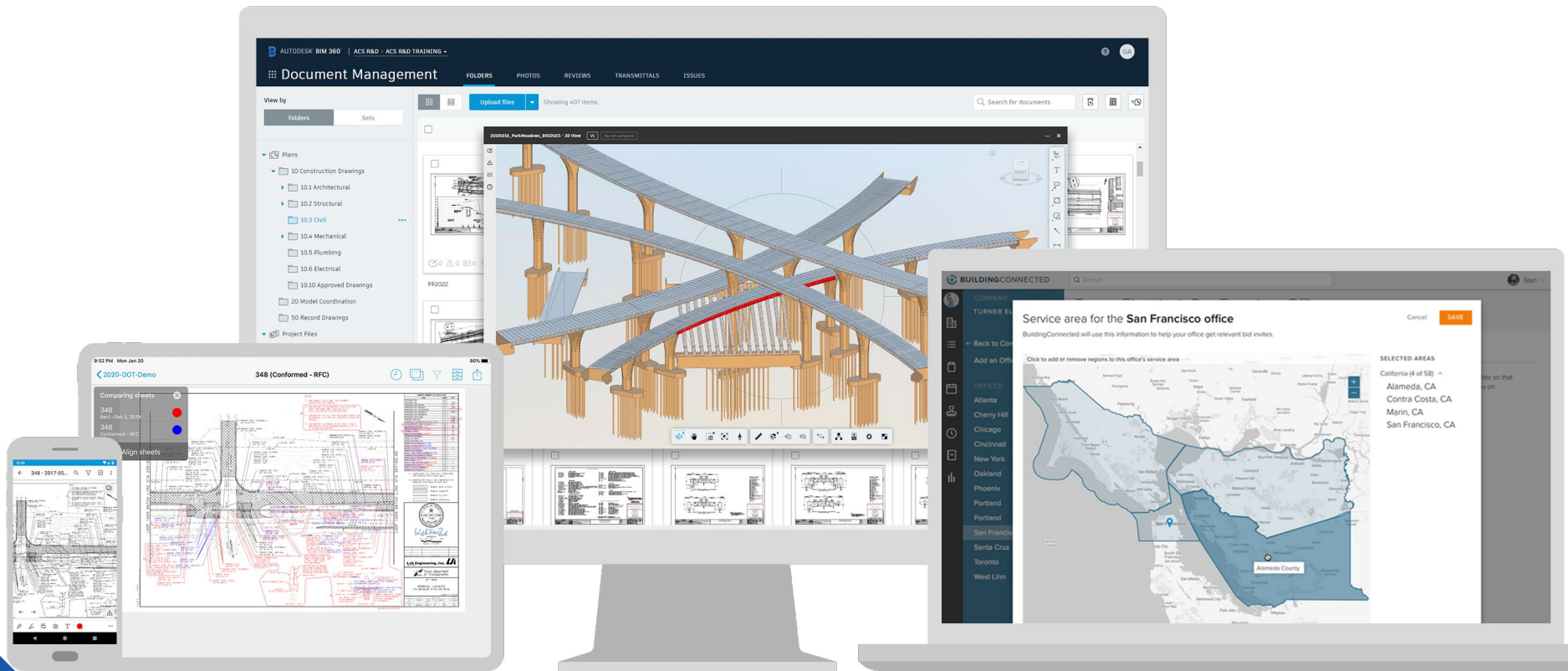


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Adapted from a presentation by Christopher Rossetto, BIM Manager at Grimshaw .

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