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RyderHKS turns to Autodesk® Revit® for sustained creativity



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Clive Hunt, Technical Development Co-ordinator, RyderHKS,

RyderHKS turns to Autodesk® Revit® to help reduce costs and build times, and maintain creativity and sustainability.

Purity of design

According to the Royal Institute of British Architects, it is purity of design that is such a readily recognisable characteristic of **RyderHKS's** work. This purity is not a matter of chance. Rather, it is the result of RyderHKS's mission to redefine architectural practice. To achieve this, the practice constantly challenges norms, strives to raise standards of service, endeavours to be ever more responsive to client needs and brings the very best to each project in terms of knowledge, creative thinking and capability. The practice was established in 1950 as Ryder and Yates, became the first UK multi-discipline design consultancy, then was realigned and relaunched as Ryder in 1997. The 2003 merger with US-based HKS has created an unparalleled skill base in design, sector specialisms and project delivery, backed by an international resource of over 700 professional staff. Now counted as the 10th largest such organisation in the world, RyderHKS can operate effectively in any location, matching skills, resource and local knowledge to meet the needs of each project. This capability is focused on each client relationship and project to create buildings that are useful, innovative and cost effective. RyderHKS has recently implemented Autodesk® Revit® to assist in developing these results.

Making the technology work for you

Clive Hunt, Technical Development Co-ordinator at RyderHKS, says, "People are increasingly conscious of quality buildings being an important part of their environment. At the same time, there is an expectation that costs and build times be reduced. The challenge is to meet these requirements whilst maintaining creativity and sustainability." To help it meet its challenge, RyderHKS has used AutoCAD® for many years. However, Clive believes, "2D CAD is really just an electronic drawing board. True, it's faster than manual drawing and it's easier to make changes and yes, you can do more in less time, but the technology isn't really working for you." He adds, "CAD software which produces building information from an intelligent 3D model has been promised for many years. Of all those who have attempted this, I feel Autodesk's Revit is the first mainstream offering that is truly intuitive and uncomplicated."

A few days, not a few weeks

Prior to accepting a position with RyderHKS, Clive was aware of Revit and his decision to join was influenced by the prospect of evaluating the product. He correctly took this as an indicator of

the practice's forward thinking. Clive says, "Our team in Dallas were getting some good results. They had taken a completed project and reproduced it using Revit. It took them only a few days, rather than the weeks it had taken them in 2D CAD." He continues, "We were aware of the huge amount of inefficiency in the way that the industry produces drawings, so we decided to do our own research and take our own look at Revit." The practice acquired a demonstration version of Revit from IMASS, their AutoCAD supplier and Autodesk System Centre, and evaluated it alongside ArchiCAD®. Clive comments, "The fact that we were using AutoCAD throughout the practice was not an inhibitor to change. If ArchiCAD had been what we had wanted, we'd have gone for it. But we didn't. We chose Revit." He adds, "ArchiCAD is a mature product and has many useful features. However, when we looked in more detail, it became clear to us that Revit was the better long term investment."

RyderHKS

RyderHKS

The potential to win more business

RyderHKS initially installed four seats of Revit in its Newcastle head office and is now progressively implementing them. Initially, Revit was used for the design phase of two projects and this number is being added to weekly. Clive suggested that the projects be handled by staff without 2D preconceptions; somebody, as he says, "...who would not be constrained by thinking about how the job would be carried out in AutoCAD." Two postgraduate users were allocated Revit to use on a number of projects. One project involves the residential redevelopment of a 1940s building in a leafy suburb of a northern city. According to the user, "We are enhancing and extending an existing office block in a conservation area, adding both a penthouse and a new wing. The contract value is several million pounds and is for a private client." The existing building has been resurveyed and the whole structure modelled in Revit. The existing surrounding properties have been built up to provide a translucent context, projected vertically from the digital map underlay. Based on the work he has done so far, the user believes that Revit helps him to be creative because, "...you don't draw lines. You draw walls, windows and so on. It's an intelligent system. It's an easy programme to get to grips with. It gives you time to design and to be creative." When asked if Revit really is as good as is claimed, he answers, "Yes, clients want to see what they are going to get, but it can be difficult to visualise a design from 2D plans and elevations and a few axonometrics. With Revit, clients really can see what they are going to get. It has that 'wow' factor. It has the potential to assist us in winning business."

Revit eliminates ambiguity

The users already see many benefits from the use of Revit. One user says, "Because you are creating a 3D building model, you can instantly see what you are designing. It eliminates any ambiguity. I only need to enter information once and it becomes available throughout the project. Changes can be made more or less

instantly and are reflected right across the project, automatically." He adds, "Any changes are fully co-ordinated, too. If you make a change, its impact is reflected upon all other information related to the model." This is a fundamental property of Revit, since any views that have been created are views of the model and so automatically reflect any changes made to the model. He adds, "The normal process would be to go through every view in painstaking detail, to make sure that a change has no detrimental effect. For example, previously you may have moved a column, you may have co-ordinated it, but you may have missed it on a detail drawing. The contractor then builds to that drawing, with costly and time-consuming consequences. This can't happen with Revit."

Building the knowledge base

Clive says, "The design of the first project using Revit was started in September 2003. The time savings made by the automation of sometimes mundane and repetitive tasks, such as sections, elevations and schedules, have given us the breathing space to learn and build up a knowledge base within the practice. It has also given us the opportunity to explore design possibilities to a greater extent. When the use of Revit becomes second nature, we should see the investment coming to fruition."

Ideal for smaller practices too

Clive clearly sees that it is not just the large practices that can benefit from using Revit. He points out, "I've worked in small practices where the designer is generally required to be more flexible and carry out a wider variety of roles. Revit becomes everything from your visualisation department to your

quantity surveyor. If I was in practice on my own, it would be the first item of software on my list."

Think about the building

Clive says, "Architects want to design. They shouldn't have to be CAD experts to do so. When creating with Revit, time is spent thinking about how the building looks and how it fits together, rather than thinking about layers, line types and hatch patterns." For success with Revit, Clive says, "Be enthusiastic, be committed and be in it for the long term. Lay the foundation and use it on a live project." He adds, "That's what we are doing here, and it's working. We are gaining momentum. We are building a pool of Revit knowledge provided by the initial projects." It will only be possible to quantify fully the benefits of using Revit when construction of the first two projects has been completed. That will not be until the end of 2004. However, Clive feels sure that, "...in, say, 12 months time, its use will be widespread across the practice."

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