ARTICLE

No. 12 January 2008

Virtual Carpet

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Nepal is known to be the best source for hand knotted custom carpet because of the uncompromised quality of the woven rug. Now many of the manufacturers here are also capable of giving their customers a computer visualization of the end product before the custom rug is actually woven. They are using a specifically developed computer software (www.galaincha.com.np) to design the carpet of desired size and quality, quickly modify the design, see numerous color combinations, immediately print the graph, and estimate how much of wool of each color will be required for weaving the design into rug.

Technology has not only helped in visualizing the end product, but also quick modifications in the design and color, and calculating the cost of rug according to silk percentage are now possible without having to wait for the strike off and production data. As the graph for weaving the rug can be directly printed from the computer design itself, the shapes and proportions of the elements in the rug remains intact no matter how complex the design is. Thus technology in carpet making is bringing in enhanced customer satisfaction, because the end product closely resembles the illustration that is provided before actual weaving begins.

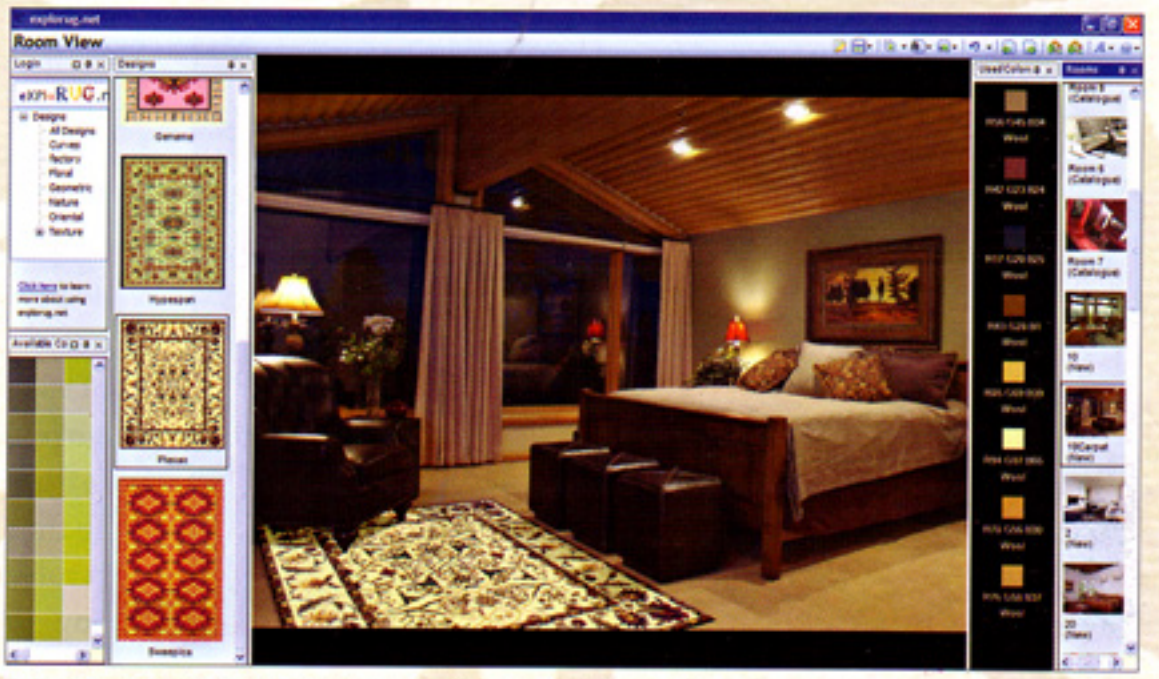
While the appropriate use of technology is transforming the production end, it is equally

▲ Loop and cut pile of wool and cut pile of silk simulation, illustration in rooms with colors changed

benefitting the importing and distribution channel as well. Communicating a rug design as a small computer file embedding all required information from patterns and colors to size, quality, and knotting details is much efficient and reliable than writing a long description in text. Therefore, many of the importers of Nepalese hand knotted rugs are also using the same software being used by their manufacturers so that they can design, customize, and communicate flawlessly with the end customer as well as with the manufacturer. The possibilities, however, are just beginning.

▲ Comparison of simulated graphics with actually produced rug afterwards

Having a web page for a rug company is quite common. When this web page is supported by a specific rug program at the back end, the simple web page can reincarnate as a full-fledged online showroom. In his article RUG INTERFACE (Modern Carpets and Textiles, Winter 2006, page 79-83), Mark Sinclair has done a detailed reporting on how various rug companies are utilizing internet based technology to transform their custom rug business. Out of the many company web sites that are



▲ The explorug.net software interface for customizing design, color and room

▲ A rug design and its illustration in room that is obtained just by one click of mouse on room picture

offering customization of color in the rug design through their web sites, some really advanced ones are offering customization of textures (cut, loop, silk, etc.) as well as viewing the customized rug in different room settings (www.explorug.net). This kind of technology is pushing custom rug business into the new heights.

As the end customers can see any design in any color combination in any room setting, including their own, just by clicking on the designs and rooms and dragging and dropping colors, they can quickly find the best rug for their room in their own choice of colors. Since the system can be accessed online and the simulations are blazingly fast and indistinguishably real, the days are not far when people will start ordering custom rugs from their home through such online systems.

Looking at the pace at which technology is unfolding newer possibilities, and at the developments that are going in the labs dedicated to exploit such possibilities for the benefit of rug industry, the technological future of custom rug business holds a lot of pleasant surprises. The following simulation is one such feature that is going to be unveiled in early 2008 so that technology users can easily see the end result of varying pile height in any design with any combination of textures. ■

▼ Virtual carpet showing regular cut pile wool, low pile loop, and high pile silk