

TRADING FLOORS

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UBS' Stamford, Connecticut trading floor.

The Right Floor

Designing a trading floor is more than laying cables and lining up desks. Often it requires building the perfect environment for traders.

Imagine for a moment the "typical" trading room. How are the desks arranged? Do the traders look comfortable or are they crowded together? Does trading technology compete with the traders for desk space? How much light is there? How noisy is it?

Chances are, the image in your mind's eye looks something like this: row upon row of desks at which traders are seated close together in a large, probably windowless room. Each trading position is surrounded by several computer screens and perhaps the most important traders have the most screens or the best vantage point from which to supervise the other traders. The room is lit with indirect strip lighting at the ceiling level, making it bright but providing little atmosphere. And the noise level is, undoubtedly, high.

For adherents to the principles of feng shui, the ancient Chinese practice of arranging spaces to achieve harmony with the environment, this archetypal trading floor design is among the least likely to promote good working practices and profitability, let alone the health and well-being of the traders. Even the most conservative interior designer will tell you that in terms of making employees comfortable, most trading floors have got it all wrong.

UBS Spreads Its Wings

There are plenty of good reasons why so many trading floors end up fitting this description. For one, real estate is at a premium in almost every financial center worldwide, prompting trading firms to accommodate as many traders as possible per square foot while also trying to plan for future hires. For some Manhattan-based investment houses, the solution has been to move out of cramped accommodations in the city and set up shop in more cost-effective locales where space is readily available.

One such firm is UBS, which in 1997 moved its US headquarters from Manhattan to a 12-acre complex in Stamford, Connecticut. Here, UBS took the concept of the monolithic trading room to the extreme, building the largest single trading floor in the world to accommodate 1,400 employees trading across equities, fixed income, foreign exchange and derivatives. Following a 36,000-square-foot expansion in the spring of 2002, UBS' Stamford trading floor is now a staggering 103,000 square feet, the same size as 26 tennis courts.

The room is an architectural marvel. To give a feeling of light and space, an arched roof rises some 40 feet above the floor, which is free of any columns or walls. Overhead, 3,600 light bulbs provide indirect lighting, while natural light streams in from windows placed high on one wall. Although one might expect a trading room of this size to be deafeningly loud, acoustic ceiling panels suck sound upward to reduce noise levels to an inoffensive hum. Indeed, the acoustic panels are so effective that Larry Liebowitz, COO of the UBS equities division in Stamford, says, "The acoustic panels can actually make it a bit difficult to yell across the room. And when something big is happening in the market, the quiet is sometimes a little eerie—you don't get the usual feel for what's going on."

Nevertheless, Liebowitz supports the rationale behind having a trading floor of these proportions. "The logic is to promote maximum flow among different trading groups and to give the feeling that the bank is much bigger than you and your product. UBS is a global bank first and a US bank second. A floor like this conveys that," he says.

Putting Technology In Its Place

For those firms content with more modest accommodations, however, dealing room aesthetics have very often been held back by traders' technology needs. Each trader is likely to have several telephone lines, as well as trading systems and data feeds running on several CPUs under the desk and displayed on several screens above it. The result is that cabling requirements alone have often forced trading rooms into linear desk arrangements, while a desk cluttered with technology seems almost unavoidable.

But over the last few years, the revolution in communications and display technology has opened up a wealth of possibilities for trading floor design, permitting new desk layouts and creature comforts like a little space. Just ask New York-based dealing room architect and design consultant Gerd Althofer. "There will always be a certain trade-off between the efficient use of floor space and people's comfort, but technology has helped to redress that balance significantly," he says.

Basic improvements like flat screens have perhaps had the greatest impact of all. Althofer says that flat screens have literally brought people closer together. In the days of CRT monitors, desks had to be at least eight feet deep, making communication across desks difficult and desk clutter inevitable. Flat screens also use 20 to 30 percent less power than the old CRTs and give off significantly less heat. This reduces air conditioning needs, another important design consideration.

Advances in cabling have also helped, says Althofer. Category-5 and category-6 cabling mean that telephones and PCs can now run on the same cable, where several cables were needed previously. "A single cable is considerably easier to interface, block and distribute, making more unusual layouts less complicated to implement," says Althofer. Other developments like remote access capability, for example, mean that CPUs can be kept in easy-to-access casings, allowing traders to continue working during ad hoc maintenance rather than watching IT support clamber under their desks during market hours.

Now that head traders and trading floor designers are no longer held hostage by their technology needs, the traditional linear layout may soon become a thing of the past. Paul LaCour, president of specialized trading-desk design and manufacturing firm LaCour Inc., says that desk "clusters" are becoming increasingly popular. In these layouts, traders can sit in a pod formation, with some desk models acting like the cockpit of an airplane, where all instruments are within easy reach. "They require more real estate, but at the same time they increase desktop area considerably. Clusters also improve sightlines between traders as well as into other collaborative user groups, such as research and execution," says LaCour.

Hedge funds generally have fewer trading positions than most sell-side institutions, and are particularly open to experimentation with their trading floor design, although unfortunately much less open to having them photographed. Nevertheless, *Waters* has heard of one fund in which traders sit in concentric circles surrounding the head portfolio manager, one trading floor with a glass-walled basketball court as its centerpiece and another built entirely in line with the principles of feng shui. These are but a few of the more unusual trading floor designs in the alternative asset management industry.

While some firms are incorporating unusual features into the design of their trading rooms, others are building trading floors in unusual locations. One hedge fund in Stamford, Connecticut is constructing its trading floor in what was once the formal dining room of an early 19th century federal-style mansion. LaCour says that for a space of this kind, a non-traditional layout is not necessarily suitable. "Instead of introducing something alien in shape, we suggested staying with the room's original table and seating plan. We thought that perhaps the modern eye would feel more comfortable with a layout that followed the seating locations of

more than 150 years," he says. LaCour then incorporated two simple twists into the design: building bows at both ends to enable clear sightlines down each end, and bringing the two head stations slightly inward to bring the head traders closer together.

Building the Brief

While breaking with the traditional trading floor layout is no longer constrained by the demands of technology, coming up with a trading floor design, or brief, can be difficult. Head traders more accustomed to running money often struggle to articulate what they are looking for in a design. Althofer's brief for the new trading floor of one Stamford, Connecticut hedge fund was so vague that he recalls presenting the chief portfolio manager with 88 drafts over a six-month period before hitting upon the right layout.

For those considering a redesign, trading floor architects advise considering the following: First, what is your firm's overall business plan relative to the number of seats and collaborative user groups? How do these groups communicate, and—more importantly—how would you like them to communicate? For example, a portfolio manager may have 13 analysts, but how regularly does he or she communicate with them and do they all need to be on the desk? Chris Grandi, head of sales and marketing at technology integrator Eze Castle Integration, says that thinking about communication and work-process flow is one of the most important aspects of designing a trading floor. This also includes communication with trading rooms in other locations. Grandi says that growing numbers of clients want video connectivity with their traders in London or San Francisco, for example. "It's very important for people to see their colleagues on the other side," he says.

Portfolio managers are also implementing connectivity to their trading operations from their homes, or even vacation homes. "It's rare to install video connectivity to someone's home—although we have done it—but people are working from home more and more often. They want the ability to see their portfolio and trade it. We can run dedicated circuits into the home, so that the trader has exactly the same functionality that they have in the office," says Grandi.

The second important consideration is how you will grow the business, and what growth potential your trading floor needs. LaCour points out that adding on to what will be a functioning trading floor must be as easy as possible to do. "Otherwise you may find yourself looking for additional real estate before you originally planned," LaCour says.

So, for those funds intent on incorporating a 1,000-gallon salt-water fish tank into their design, with all the necessary steel reinforcements for the floors—yes, they are out there—it's worth remembering that if your fund grows, the fish may need to find a new home.

Going Feng Shui

Applying the principals of feng shui to a trading room environment might seem like a futile effort. Trading floors are typically loud, busy, aggressive places, far from the havens of balance and tranquility espoused by feng shui philosophy. The floors typically have a great deal of yang, or male, energy—straight lines, hard surfaces, and speed—and a great deal less yin energy, which consists of natural elements, soft focus and ambient lighting.

But Reiko Gomez, who runs design consultancy Reiko Feng Shui Interior Design, says that there are things that traders can do to improve their environments. In feng shui, certain positions suggest vulnerability and others suggest power—powerful positions face a room's entrance and vulnerable positions do not.

In a traditional trading room layout, says Gomez, there are a large number of vulnerable positions. The ideal alternative layout, she says, would be to create a central entrance with a ring of trading positions around it. "I would also look to cut down on traffic around individual desks and buffer the desks somehow, so that each trader has a feeling of privacy and security."

Gomez, whose husband is a money manager, has implemented these principles for his trading position at home. "Essentially, I made him king of the universe. His seat is in the center of the room and I built a desk around him. The desk is octagonal, which is the most balanced shape in feng shui, giving him a still point in which he can be steady-minded. Trading is a constant mathematical process, so the more focused you can be on that the better," she says.

But what of the technology? Surely all that Yang energy could upset the balance. The logistics of a trading room need not interfere with a feng shui approach to a room's layout, LaCour says. "Instead, if properly incorporated into the design, technology enhances it. After all, good karma only goes so far when the power goes out, or when the CFO comes down on IT about all the extra overtime it takes to move, add or change desktop equipment," he says.

By Saskia Scholtes