Discussing buildings in 2013 means discussing sustainability, and if we take sustainability seriously, we must admit that the most sustainable buildings are those that are not built. In view of the fact that expanding retail space is reflected in shrinking turnover, the discussion about refurbishing existing centers is set to become increasingly serious. This is true not only in mature markets like Germany, where 64% of all shopping centers date from before 2000 and almost every second one needs refurbishment. Even in new markets such as Russia or the SEE Region, centers that have been operating for fewer than ten years must improve their concepts if they are to remain competitive in their markets.

Most building activities must take place while a center continues to operate in order not to lose contact with customers and tenants. This is undoubtedly a serious challenge for architects and engineers, who must find appropriate design solutions and ways of implementing these new solutions in a short time and with a limited budget and minimal disturbance to the existing shopping experience.

The integrated design process (simultaneous planning by architects and structural, mechanical, and electrical engineers) is increasingly becoming a precondition for life cycle-oriented new buildings. In cases of refurbishment, too, it is a must. Single-point responsibility for planning and site supervising activities is also a precondition for successful refurbishment. Thankfully, the IT-industry has developed BIM (Building Information Modeling) programs that are able to support these complex processes. This precise virtual reality model of the existing building – which includes all information about the mechanical and electrical systems, tenants’ improvements and, later, customer circulation, delivery and individual footfall – is especially decisive in refurbishment projects.

On the basis of these data and an integrated virtual model, potential options can be simulated in a virtual world. This provides a way to deliver solutions for the optimum final performance of the refurbished facility and can advise on the best construction methods while delivering analyses of timetables and budgetary frameworks. After having determined the final project, the whole process can be planned precisely and is able to react to all the surprises that any refurbishment will deliver. All complex building procedures can be visualized and shown to tenants, contractors, and even customers, in order to involve them in this shared project with a shared goal. We have often seen customer relationships become even stronger during a refurbishment project. Do not underestimate the strength with which regular customers identify with “their” center during its refurbishment. If improvements can be successfully communicated as resulting from customer demands and proposals, this will increase their affinity with the center.

Regarding our responsibility for future generations, we can make a commitment to re-using existing structures even as we design new buildings. The life cycle of a load-bearing structure is different from that of the building envelope or the technical systems, which is different from that of all the interior design elements. For this reason, we must react with design solutions with different levels of durability and incorporate the ability to separate these various elements and materials for future refurbishments.

A great challenge for owners, operators, and, certainly, for architects and engineers.