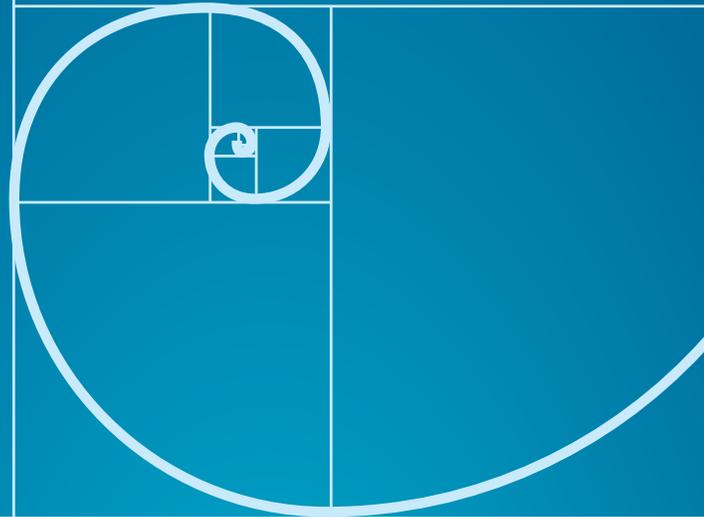


Integrated Design

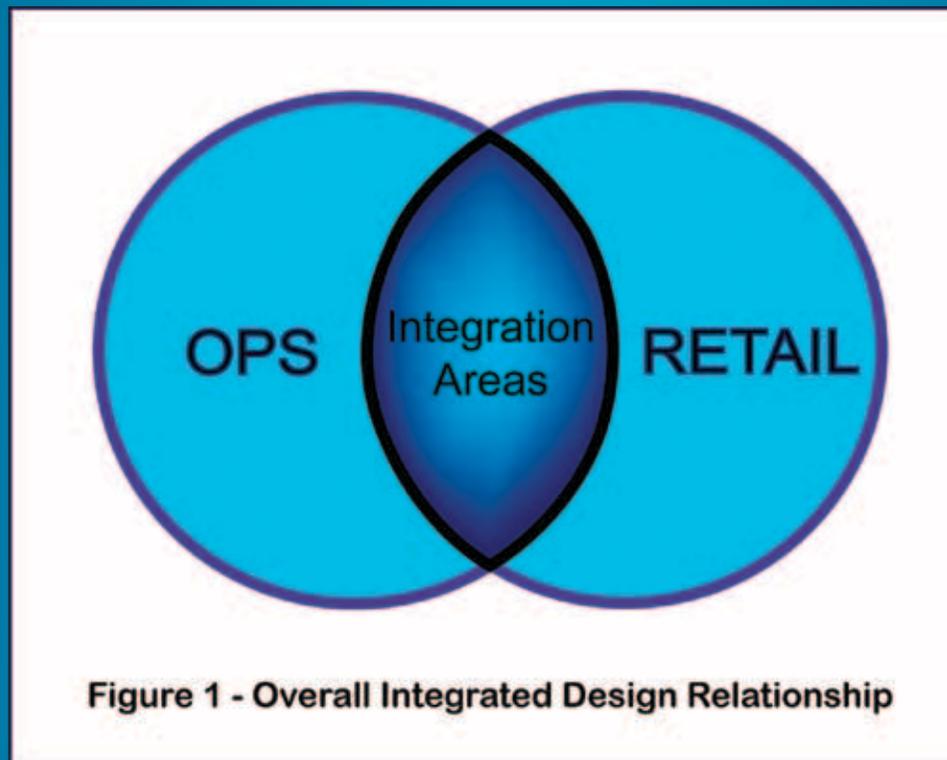
By
Juan
Martinez, PhD, PE



There is often misunderstanding about exactly what is integrated design. This is not surprising since integrated design can have various meanings and consist of multiple levels. Furthermore, it can be interpreted differently by different people.

True integrated design involves a specific, careful and calculated effort to undertake designs that understand and incorporate the relationships between all the areas that make up a foodservice concept. These include both retail (“form”) and operational (“function”) aspects, especially those that impact the customer experience directly. Considering, focusing or making changes in any one of these areas without taking into account the other, often results in a less than optimum design and a dilution in the impact and customer experience for the change undertaken. The main reason for the latter is driven by a strong interrelationship that exists between form and function, which can be depicted as two intersecting circles, Figure 1.

Both the form aspect and the functional aspect of design have a significant impact on the final concept and overall customer experience delivered. The aspects of design that fall into the intersection of the two design



areas – retail and operations – are the ones that drive the need to undertake designs in an integrated way, in order to develop an optimum design, one that drives the maximum customer impact.

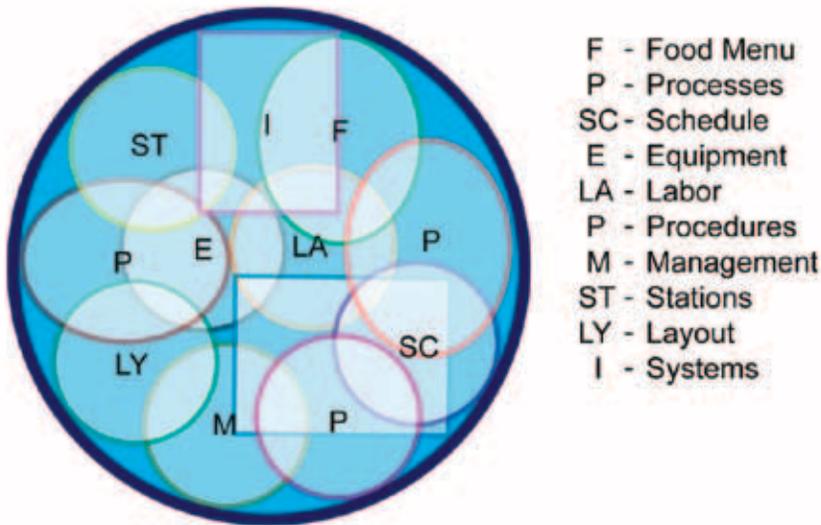


Figure 2 - Ops Internal Area Relationships

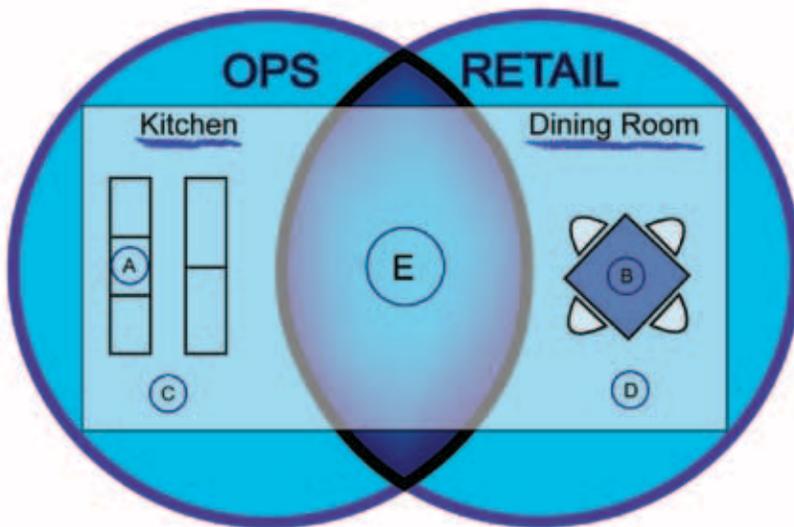


Figure 3 - Specific Integrated Design View

Similarly and additionally, it is important to realize that each of these two main functional areas, ops and retail, have multiple components, which are also interrelated and can be depicted in simple form as the intersection of each with the other, as shown in Figure 2.

Although it can be difficult to define without detailed analysis and thought, the inter-relationships within each of the two design areas are typically the drivers of design, and should be considered simultaneously and designed in synergy, in order to maximize the final impact on the consumer hospitality experience, as well as the profitability of the concept.

Superimposing the previously shown intersection circles, with a simple drawing of a restaurant, as shown in Figure 3, better depicts the aforementioned inter-relationship. The OPS area shows a kitchen line, while in the Dining Room a customer area is indicated in the form of a table.

The operations related components are shown as A, C and E, while the retail ones as B, D & E. Let's have a look at the different levels of integrated design.

Integrated design levels

To understand integrated design more completely, as previously mentioned, one has to consider that within the two areas of retail ("form") and operations ("function"), there are also three levels of integrated design as well as five components, that make up the "Integration Continuum", as shown on Figure 4. The higher the level in the scale the greater the integration.

For example purposes, the letters in Figure 4, relate to those shown in Figure 3. On the lower level of integration, the designers may be working with individual components of retail or operations, depicted by A or B. At this level the aspect of retail or operations being considered and analyzed would be limited to any one individual component of the customer experience such as a chair or a table in the retail area, or a new cooking device, in the operations area. This is a scenario of pure non-integrated design.

The second level in the continuum involves more integration in the design within each area, depicted by C or D. In this middle level integration example, although the inter-relationship between the different aspects of retail and operations across each other are not directly considered, those within the multiple aspects of each of the two areas individually are. This level of integration may result in a higher level of impact within the area, but a sub-optimized level of aggregate impact in the overall design.

A retail experience example of middle level integration could be how a chair, the lighting, the paint, and the floor all relate and impact the consumer experience. An example of the operations side may include a new, faster cooking device for a specific menu component, along with the station design, labor and processes, among others.

The first level of integration mentioned, where the cooking device is analyzed independently, without considering the other aspects of the order and operating platform, may result in faster cooking times for a specific item, but may have a negative impact on quality, since the product could end up waiting for other items to be finished before the full order can be delivered. This is one of the advantages of the middle level of integration within the specific operations area, where multiple components are considered simultaneously, balancing out the impact.

The highest level of integration involves considering multiple components in each area – retail and operations – simultaneously, and understanding how these interrelate with each other. This especially affects the aspects of design that fall in the intersection of the two areas, as depicted in Figure 1 and (E) in Figure 3. Some of the larger customer deliverables that may fall in this category are those that impact food quality, service time and menu offering, among many others. As previously mentioned, usually the areas of design that gain the most benefit from a fully integrated design are those that have a direct impact on the customer.

As you go up the integration continuum, the effort and cost may be higher, especially

Integration Level Scope	Integration Continuum
(E) Multiple Retail & Ops Components	High ↑
(D) Multiple Retail Components or (C) Multiple Ops Components	↑
(B) Individual Retail Component or (A) Individual Ops Component	↑ Low

Figure 4-Integration Design Continuum

in the short term, however the return on investment is proportionally higher than the investment, resulting in higher impact.

Why integrated design?

Simply put – because of the impact!

The higher the level of integration, the more likely there will be a significant impact on the customer service and hospitality, and thus, a higher profit and return on investment that supports faster brand growth. Integration increases the likelihood of ending up with “the right” design, instead of just “a design”.

Progressive and growing foodservice brands are always seeking ways to drive improvements that can positively impact customer hospitality and profit. For concepts to grow, they have to evolve, continually designing and reinventing themselves to stay relevant to the customer. Understanding that perhaps yesterday’s retail or operations designs may be inhibiting future growth is a must. The longer the time the design has not evolved, or has evolved in an un-integrated fashion, resulting in piece-milling the evolution, the more likely this is true.

The restaurant industry has seen a significant amount of innovation and growth from the supplier base as well. Similar to foodservice brands, suppliers, being

True integrated design involves a specific, careful and calculated effort to undertake designs that understand and incorporate the relationships between all the areas that make up a foodservice concept.

Gaylord

FP

“Brands” themselves, also have to stay relevant to their customers, providing solutions that resolve business issues that will support growth. They are continually searching for innovative products to address issues in the industry. These may be in the form of new menu items, retail design components, or operations related devices and equipment. The key is to consider and apply these innovations following an integrated approach, within or across the specific area, (retail or operations), bearing in mind the inter-relationships of the components that make it up.

It would be nice to be able to apply “silver bullet” solutions that could drive significant change by themselves. While there may be some of these, there are most certainly plenty of opportunities that, if analyzed and applied following some level of integrated design process, will drive significant impact; definitely more than if they are done separately. The impact of the sum of the components together is larger if done in an integrated fashion, than if done individually, while the overall cost of implementation will be lower, resulting in a higher return-on-investment. This is the power of integrated design!

In my 25 years in the foodservice industry, I often come across clients that tell me that they may have already tried a specific piece of technology or design being suggested. As I follow the reasons, I quickly come to realize that this may have been applied individually, rather than in an integrated fashion. This difference can result in a successful application and drive positive results. My experience is that although applying truly innovative retail or operations solutions may drive impact, this impact is usually reduced, or short lived, if the application is by itself, instead of holistic and integrated.

Sometimes “Brands” opt not to take an integrated approach due to concerns about how long it would take, the internal effort required and the cost. Although these are reasonable concerns, they are only front end and short term. Depending on the integration approach taken, with internal personnel or external retail and operations consulting design firms, some of these concerns can be reduced or eliminated completely. Without a doubt, in the long term, following an integrated approach will deliver more “bang for the buck” and a higher return on the design investment, especially when considering the impact it will have for the “Brand”, with improvements in customer hospitality, increases in sales and profits, and brand growth. Proactive “Brands” realize this, and often take the integrated approach. They are cognizant that a new and innovative retail design on top of a weak operating platform design may drive an initial visit by the customer, bringing them in once, but will likely fall short on driving repeat visits, which is a greater goal of any thriving food-service business. Similarly a new operating platform, with a weak retail design, won’t drive the maximum impact.

The question of whether or not to undertake an integrated design effort quickly becomes a clear statement of what must be done, if strategic, long-term growth and maximizing the impact are the objectives. This is simply due to the fact that the different aspects of the customer experience require a careful and calculated design effort, to end up with “the right” design and ensure that the maximum profit and hospitality experience is delivered to the customer; one that will fuel “Brand Growth”, driving “Profitable Hospitality”. 🌍

Juan Martinez is Principal & Founder of Profitality, an consulting organization that specializes in helping multi-unit foodservice brands design concepts that deliver higher sales and profits to fuel growth, by applying the principles of Ergonomics and Industrial/Operations Engineering. Juan, a 25 year veteran of foodservice brand and operating systems design and management, has a PhD in Engineering, with specialization in Ergonomics and is a licensed Professional Engineer.

Gaylord

1/3 page