

*Associates are photographers, not graphic artists*

Photographers are trained to use the camera, not Photoshop. When an inexperienced user sits down at Photoshop, the most likely result is a lousy image. It's a power tool for power users, and there should be no need for a photographer in a portrait studio to get up the Photoshop learning curve. Photoshop and its cousins would also slow down studio workflow. Instead, studio associates need to create beautiful images rapidly.

*Studios are remote*

Studios are geographically dispersed, with little to no local technical support. Hardware deliveries or replacements require shipping components back and forth.

*Networks are fallible*

Some studios have no network connections. Even for the ones that do, it's not acceptable to halt the studio if the connection goes down.

*Customers expect their own products*

Customers should receive their photos with their designs and text.

*Production is centralized*

High-quality photographic printers are becoming more common, but making products that can last for decades requires much more expensive equipment.

*Production throughput is important*

The same printers are also the constraint in the production process. Therefore, every other step in the process must be subordinated to the constraint.

These facts lead to several forces that we must balance. It's common to perceive the forces as fundamental, but they aren't. Instead, they emerge from the context in which the system exists. If the context changes, then the forces might be nullified or even negated.

We chose a handful of constructs to resolve these forces. The rightmost column of Figure 4-1 shows these facets of the architecture. Of course, these aren't the only Creation Center features worth discussing, but these facets of the architecture are of general interest. I also think they simultaneously illustrate a nice separation of concerns and mutually supporting structures.

Before digging into the specific features, we need to fill in one more piece of context: the system's workflow.

## **Workflow**

The typical studio has two to four camera rooms, stocked with professional lighting, backdrops, and props. The photographers take pictures—each picture is called a “pose”—in the camera room. Outside of the camera room, photographers also handle customer service, scheduling, and customer pickups.

When the photographer finishes taking the pictures for a session, she sits down at any of several workstations to load the photographs from the camera's memory card.