DESIGN AND DEVELOPMENT PROCESS

St. Clair has assisted in the Design and Deployment of more than 600 self-service projects. Over this period we have evolved a process for Planning and Design that is highly effective and produces success rates for above market averages.

We highly recommend that clients adopt this process. It is collaborative (Client / St. Clair / other parties – such as integrators / hardware partners / participating vendors, etc).

Getting Started

The process begins with a Service Design phase. This stage incorporates Business Requirements documents / RFP requirements / Executive strategies, etc but goes beyond these. We help to examine end user needs and business opportunities, then prioritize solutions against data / transactions / media / fulfillment resources.

The Service Design normally takes 4-6 weeks depending on the availability of client resources. There are numerous activities running simultaneously, however there is a logical structure which is helpful in setting benchmarks and in project control!

1. This Service Design process is critical to our success and to the success of our clients. It is a systems approach to a project. It results in superior user interfaces and superior economies of ongoing operations.

   The major output from the Service Design (following team discussions and needs analysis) are as follows:

   1. Priorities and Implementation Sequence
   2. Identification of Building Block Products
   3. Content Plan and Master Navigation Strategy
   4. Transaction Plan
   5. Media Combinations & On-System Storyboard
   6. Operations and Communications Interfaces
   7. Technology
   8. Budgets and Timing

2. Initial Information Links

   As a result of the content plan from the Service Design, the project team can begin to design key links to existing information sources and databases. The sources of device information which can be easily reprocessed for your project will be accessed and tested.

3. Marketing Tools

   Also during this time i.e. from approximately Week 3 through Week 4, we would recommend the construction of an on-system storyboard.

   It is our experience that it is essential to have the simulation of the top levels of a real service, to focus the attention of team members, to clearly communicate the dynamic nature of your interactive services to senior management and to a broad range of other parties who have an interest in the project.

   We normally spend an intense effort in crafting the demo and the pilot applications as they are multipurpose tools. They become the soul of the project in that they reflect the information, an approach to the user interface, and other elements which reflect the vision of the project.

4. On approval of the Service Design and appropriate Statements of Work, the collaborative team commences Development.

   St. Clair has a number of suggested methodologies which are proven to reduce development risk and time to market.

   We encourage collaborative tools such as client participation in the Assembla platform we use internally. We encourage client participation / review timing based on the Agile (SCRUM) methodology we use.

   Shared test hardware / interim links ensures that Client and St. Clair are continually reviewing each stage of work (each 2-3 weeks work product) so there are no surprises and each cycle builds on a solid foundation.

   Generally St. Clair will have a team of 8-12 specialists involved in the project, including User Experience / Visual Design / Media Linkages / Local and Remote Data handling / Services, Secure Transaction Developers / Operations platform customization / Integration / QA / Project Management.

   Various specialists contribute blocks of work product. The blocks are coordinated, unit tested and integrated into the shared test platform for joint review.

5. Successive reviews are held on the basis of latest available stages and testing can be done on completed modules as they are produced.

6. Media production also takes place in parallel with the software and integration. Video, audio, product images, etc, etc are run through their individual stages and put into the data directories under individual projects.

7. On completion of the working software / content / connectivity, Client can re-test on the test plan and / or distribute for pilot units. Integration with COMMAND & CONTROL and specific Device Status tables take place before that step.

8. Production and Operations: Start-Up

   We provide consulting and design services in regard to the multimedia operations process and the structure and the facilities for it. Obviously we have been part of hundreds of project start-ups. We are familiar with the short term and long term needs in regard to content preparation, storage, multimedia processing tools, scheduling, documentation, etc, etc. We would like to help you build a model operation which runs in a very efficient and effective way. Of the available alternatives to help achieve this, we suggest that either:

   i) we could form an integral part of the production team as we have with clients where St. Clair personnel work on-site as part of the ongoing production group

   ii) we could potentially subcontract for some of the operations. We would certainly need definition of scope, turnaround time, etc, etc before we could undertake any pricing in this regard.

9. Measurement and Reporting

   As you know, each system also contains user statistics measurement software. We probably make more use of measurement tools than most companies in that we have measured every one of the 600+ projects we've executed. St. Clair constantly compares the statistics flows with the navigation flows. We look for patterns in user disengagement, reduced completions, time impact, increased marketing impact and service levels, fine tuning of production needs, etc, etc.

10. <u>Evaluation and Evolution</u>

Self-service is a direct communications tool that operates on a one to one basis. As with all such methods, it can be constantly <u>fine-tuned</u>. Increased revenue, better productivity, lower costs of operation, etc are <u>continuing</u> goals.

In addition we're sure you will find many additional services that can be delivered using the same backbone e.g. staff information and product knowledge training, other service activities, multilingual services etc.

Our goal is to have a long term relationship which gradually transfers the routine requirements into the client organization, while ensuring the involvement of key St. Clair specialists who may only be needed occasionally or on a special assignment basis.