Web-Based Interactive-Video Retirement Plan Management System: Build it or Buy it?

As retirement plan providers continue to embrace web-based technologies for participant communication and plan management, they must address how best to deliver the functionality and user experience envisioned by the business plan. In short, they face the classic 'build it or buy it' question.

In many cases, building a custom technology solution is the right answer, as the functionality is core to the organization's mission, or the costs (and risks) to create and maintain the solution are sufficiently low to justify the project. To deliver a web-based interactive-video plan management system, ("IV" system for short), however, the best answer in almost all cases is: Buy it.

Web-Based Interactive-Video Retirement Plan Management Systems:
A Large and Ongoing Challenge

Creating and maintaining an IV system such as the award-winning SmartPlan Enterprise system from vWise, requires a broad set of skills and an ongoing commitment to content creation and web development.

People with various types of expertise — from content production, web development and database programming, to legal and industry knowledge — must come together to produce and maintain an IV system, which makes a system like SmartPlan Enterprise an order of magnitude more difficult to build and maintain than a traditional technology project, such as a database-driven user website.

Once the system is built, it must be managed and maintained with 100% uptime, just like any other web-based system. But the burden placed on an organization to maintain an IV system differs from other systems in two important ways. First, because an IV system serves video files and hosts interactive applications, it requires sufficient internet bandwidth to stream relatively large files to thousands of simultaneous users without the type of file buffering that creates "choppiness" and a poor user experience. Thus a large and sophisticated server infrastructure is needed, together with a file compression algorithm that optimizes file resolution and playback at the chosen bandwidth. Second, IV systems require maintenance — in the form of updates to content and applications — on a consistent basis, at least a quarterly. Like painting the Golden Gate bridge, the work on an IV system is never done.

Here is a partial list of what is needed to produce and maintain an IV system:

- *Scriptwriters and Designers:* Complex information such as retirement plan features and benefits must be packaged and presented in a way that employees can understand. Professional writers and designers can help simplify difficult concepts and make them accessible to viewers.
- *HDTV Video:* The quality of a video image watched on the web is directly related to the quality of the original recording. While the internet is a low-definition medium, an HD recording captures significantly more detail and is thus more engaging to viewers, than a low-definition video image.
- *Professional Hosts:* By delivering their lines with a natural, conversational tone, professional hosts ensure that viewers of all education levels and backgrounds feel engaged.
- *Interactive Applications:* Interactivity throughout the experience acts as a glue, keeping participants engaged in the planning process. Interactive forms also help the IV system learn about the participant and, based on rules established by the plan provider, can shape the user experience through the display of designated content.

- *Administration Portal:* An IV system must be customizable at the individual plan level. And plan-level customizations require extensive administration capabilities, including the ability to turn on or off certain video and interactive modules, and customize the risk profiles, investments, and other content.

- *User Tracking & Analytics:* Individual user tracking and analytics, reported through the administration portal, provide valuable insights into individual participant needs, reveal patterns and trends in the plan, and help identify areas for system improvement. In addition to standard traffic and activity reports, custom reports must be crafted, to track participant actions inside the IV system.

- *Database Integration:* Individual plan participants must be given a personalized experience where possible. Plan balances, personal information, and preferences should all be pulled down from the recordkeeping database and accessible inside the IV system. And plan choices made within the IV system should be uploaded to the database when complete.

- *Infrastructure:* In addition to the web servers already in place to host the participant website and database, an IV system will likely require separate servers to host video content and interactive applications. The IT or production team will need to devise a custom file compression algorithm that optimizes transmission and playback at a chosen bandwidth.

The next section describes the costs, timing, and risks associated with building or buying an IV system that has the features and functionality described above. It will do so by asking and answering a series of questions designed to help a business unit manager determine the best path for his or her organization.

1. Does the Organization Have a Bias Toward 'Build'?

The Gartner Group reported recently on a shift towards "build" among companies, and cited several reasons: the impact of new technologies and the availability of skilled technologists; the recognition that many packaged solutions

are seen as too cumbersome, bloated and expensive; the need of organizations to adapt solutions to their unique business models and idiosyncrasies. Whatever the reasons for preferring to build custom solutions, an organization must be honest about the existence and extent of its bias. It must be acknowledged and its value quantified. Is the experience of building a custom solution worth something to the organization? Or is it merely the product of the custom build that is expected to have value? In the case of an IV system, any bias toward building a custom solution must be weighed against the likely fact that video and audio production and interactive software development are not core competencies.

2. What is the Organization's Core Competency?

Core activities are those that contribute directly to the organization's differentiation and value creation. It is in core areas that organizations gain strategic advantage, and where information systems must conform to business processes, not the reverse. When assessing a build v. buy decision, know whether the particular activity is core, and thus worth controlling, or whether it is appropriate to conform to the capabilities of a commercial package. The larger the scale of the application, the more important it is that it represent core business functions.

Plan recordkeepers and providers typically consider participant communication a core competency, insofar as it is an extension of their recordkeeping duties for plan sponsors. But communication involves different skills than recordkeeping, and recordkeepers and plan providers must ask themselves how prepared they are to create and manage an IV system, arguably the most sophisticated web-based communications infrastructure available.

Building an IV system like SmartPlan Enterprise will likely be unlike anything a provider, even one experienced in participant communication, has ever undertaken. Existing employees will need to learn new skills, or new employees with the necessary skills will need to be hired. Based on our experience, an IV system needs an in-house team of at least twelve to twenty people in IT, a similarly sized team in marketing, and a customer support team with at least one

person for each hundred sponsor plans on the system. This team does not include actors and other creative or production professionals, who will be required on a consistent basis and are best hired as independent contractors.

3. How Important is a Custom Fit?

Fit assesses how close the match is between what the business requires and what a packaged solution provides. The traditional rule of thumb is that a packaged solution must meet a minimum of 80% of the required functionality. SmartPlan Enterprise is engineered to be modular in nature, and is customizable for each plan, either through manual settings in the administration portal or automatically through the recordkeeping database connection. This type of design provides the best of both worlds: the fit of a custom application, with the convenience of a commercial solution. It also means, of course, that significant additional programming expense has gone into SmartPlan Enteprise, to give it such flexibility. An IV solution deployed over a large number of sponsor plans will need similar capability, or it risks being unsuitable for a large portion of the plans it is intended to serve.

4. Total Cost of Ownership?

Total Cost of Ownership (TCO) includes not only the cost of acquisition, configuration, and customization, but also the ongoing support, maintenance, and evolution of an application. Software solutions represent an investment of at least five to seven years, and it is quite common for ownership costs to dwarf acquisition costs.

SmartPlan Enterprise is no different than any technology system, though as an IV system its economic lifespan is a bit shorter than average — just 3 to 4 years — due to the fast evolving nature of the technology involved. Despite the shorter life, the cost of maintaining it far exceeds the cost to create it originally. Development costs for a custom IV system, including video and audio production, interactive and web programming, and infrastructure acquisition and installation, will likely run into the millions of dollars. Maintenance costs for the life of the system will easily eclipse those development costs. Major costs include:

- *Personnel.* Using the employee numbers cited in the Core Competency section above, a provider can determine one of its chief costs: personnel. Personnel costs for each provider will vary, depending on geography, existing personnel that may be available to transition to the IV system team, and other factors. The composition of an IV team will resemble any other business unit, requiring managers for each discipline (IT, creative, marketing, and support), and team members with various levels of experience.

- *Technology.* With secure dedicated servers required to host an IV system, technology costs are an important part of the equation. If a provider is already running a standard web implementation and database architecture, the necessary infrastructure to handle an IV system should be budgeted at $

- *Content Creation.* Using a budget yardstick of $20,000 per finished minute of video content, $10,000 per screen of interactive content, and five to ten IT man-hours for each minute of finished content, a provider can determine a likely budget required to produce an IV system to its specifications.

- *Updates & Maintenance.* Once an IV system is deployed, upgrades to content and applications require at least fifty man-hours for each minute of content, and at least two to five minutes of content must change each calendar quarter.

Understanding the significant costs involved, and anticipating such maintenance requirements, we designed SmartPlan Enterprise as a modular system that allows for upgrades to each of its component parts, as needed. For instance, as laws regarding retirement plans change, the video presentations and applications that are affected by those changes can be updated and replaced without disruption to the rest of the system. And the cost of maintenance can be spread across multiple clients, up to hundreds of thousands of sponsor plans.

5. What is the Timing of the Project?

Timing in custom development is difficult. Frequently during the requirements process, multiple stakeholders — often with divergent agendas — clamor for inclusion of features important to them. Scope creep occurs. The greater the degree to which the organization can accept a pre-defined business process, the simpler the implementation will be. If a package can be used "as is" without any adaptation to the organization's business processes and practices, then it will have a substantial advantage over a custom implementation. Implementing a standard subscription to SmartPlan Enterprise takes as little as a few weeks, including client training and the creation of custom marketing materials. By contrast, deploying a custom IV system, including site design, script approval from FINRA, production, programming, and testing, will likely take an organization 18 months or longer. And if changes are required after deployment, SmartPlan Enterprise has the ability for on-the-fly customization, through the administration portal. Further customizations, if desired, can be accommodated through module-by-module modifications, rather than wholesale changes to the system, and produced in as little as eight weeks.

6. Risks?

All projects involve risk. Quantifying the risk involved can prove tricky, especially on large and complex projects. Of course, merely by being large and complex a project can be assumed to be risky, even if specific risks are hard to quantify. Deploying an IV system is a large and complex project, and has many of the characteristics of the most risky IT projects:

- Large teams of people performing multiple, dependent actions;
- A 'creative' aspect, and thus inherently uncertain outcomes; and
- Significant sums of money being spent in advance of tangible results.

We designed and built SmartPlan Enterprise with a team of veteran professionals from Hollywood, Madison Avenue, Silicon Valley, and Wall Street, with an average of almost twenty years experience in their respective industries. We worked with a Fortune 100 client to identify best practices in retirement plan enrollment and management. We tested early versions of the application using

an audience of over 60,000 employees. Still, it took us almost two years to produce the first system worthy of the name SmartPlan Enterprise. And it has grown significantly in the three years since then, with dozens of additional features and capabilities, such as optional personalized advice.

SmartPlan Enterprise: Bespoke Fit, Off-the-Rack Efficiency

The deciding factor in the build v. buy argument is often how the decision will affect the bottom line. Many organizations opt to purchase commercial software, to cost-effectively leverage the investment made by a vendor with a proven track record of success and innovation. But any commercial solution will likely need to be customized somewhat, to better fit the organization's needs. SmartPlan Enterprise has been built with customization in mind. Through the use of a modular format and web standard architecture, individual components of SmartPlan Enterprise can be customized to suit a client's specific requirements. Thus a large organization can have the best of both: the ease and efficiency of a commercial solution, customized to fit like a bespoke application.