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In the last few years, we've seen countless companies attempt to push out the same old product in a new box. Somehow, online learning turned into online textbooks—and the same books nobody reads are going equally unread online. We know that “telling” is one of the least effective ways for adults to learn, and yet, most on-line learning does just that. The online world provides us with a new medium, but we need to use new ways to deliver new messages.

What is a simulation?

A relatively specific definition of simulation would be “an online re-creation of a real business environment for the purposes of learning.” In a simulation, the user is usually asked to play a role, and makes decisions in the simulation based on that role. The decisions that the user makes determine the outcome of the simulation storyline; multiple outcomes are possible. The simulation storyline is based on real-world business dynamics, and the outcomes of decisions are based on analysis and research of real companies. This is also referred to as a “systems dynamic model,” in which a given action has effects upstream and downstream.

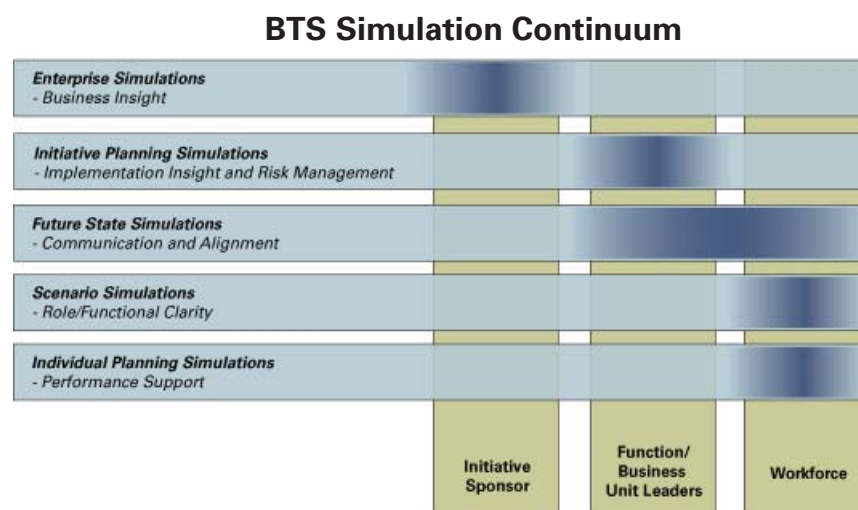
That being said, simulation can take many forms. Users may be asked to take the helm of a company undergoing a major change effort, determine strategy for a newly merged organization, make financial decisions for an e-commerce startup, or plan a sales account pursuit strategy. Also, simulations may be designed for individual use, or require the cooperation of a team; they may be synchronous (all users participating at the same time) or asynchronous (users participating at different times).

Historically, simulation has been used as practice or testing. Typically, users were required to go through a daunting amount of content before they were “allowed” to try their hand at the simulation. In BTS's simulations,

the simulation *is* the experience. Users are immediately placed in the simulated environment, where they determine whether they can solve the problems and achieve the goals that the simulation presents. If the user needs more information or help, there are multiple opportunities to access supporting resources or link out of the simulation to gain access to additional content, tools, etc.

The Simulation Continuum

Simulation is BTS’s paradigm for creating the most value in improving organizational and individual performance. It is well established that adults learn best in a “learn-by-doing” environment. Although simulations have often been used in for skill practice, BTS’s *Simulation Continuum* takes the concept one step further, making simulation the primary driver of business insight and behavior change across the life of business processes or corporate initiatives.



BTS sees simulation in a continuum. Application depends on need. Simulation can be used to analyze and understand the whole enterprise, a specific initiative or process, the future state when the new way is installed, the required roles or functions, even specific performance tasks. It can be used to plan and test out strategies, models, and responses; to communicate, provide context, energize, have fun, and get people engaged; or to assess how the organization is doing or how individuals are performing a given set of behaviors or tasks around a new process or initiative.

What are the characteristics of effective simulations?

Let's explore the characteristics of simulations across BTS's continuum. These characteristics apply to each type of simulation on the continuum, and are what makes BTS's simulations so effective in achieving business results.

1. Learn-by-Doing

Simulation users don't learn the history of a behavior, or a conceptual overview of a behavior, or how to use a behavior to leverage their core competencies. They see how to **do** the behavior. The simulation places the user in a realistic business environment, where they are asked to complete tasks with legitimate business goals. In order to meet these goals, users must utilize known behaviors, or learn new behaviors.

2. Discovery Approach

Users begin the simulation without a great deal of prior knowledge on the simulation itself. They may have received the context around the initiative at hand, background information on the simulation storyline, a description of issues currently facing the simulated company, perhaps a tutorial on using simulation features. They may go through a series of profiling questions or other type of assessment in order to determine their knowledge or experience. Once in the simulation, users decide on a particular role to play in the simulation, and then enter the storyline. This approach allows users to move through the simulation and "discover" what they know or don't know. Any time they feel the need for help, or are unprepared to continue, they may access supporting resources or link out to additional tools.

3. Context-based Insight

One of the most important characteristics of simulation is that it provides users with realistic contexts in which to test and develop their understanding, knowledge and competence. This is the best way to insure that they have experience in the type of situations they will face in their real jobs. Actions, decisions, and results must be grounded in real-life experience. Transfer of insight and knowledge to the on-the-job performance situations will be enhanced because of the practice inherent in the simulations. This context-setting is especially critical in helping users understand their role in a corporate initiative, which often has enterprise-wide implications.

4. Goal-based Scenarios

Many of BTS's simulations utilize scenarios as the primary focus. In simplest terms, a goal-based scenario is a simulation challenge that has a goal—a distinct, desired outcome. Depending on the simulation objectives, there may be multiple paths to the goal. Goal-based scenarios are useful in simulation because they help identify the business result of achieving behavioral objectives. They also engage users with a sense of purpose & accomplishment. Goals in goal-based scenarios are helpful to the extent that users' personal goals match the scenario's goals. Because they link to the users' goals, users are better prepared to internalize them and be more receptive to the new information.

5. Consistent Feedback

Feedback is one of the defining characteristics of simulation. Users are immersed in a storyline, and have control over their progress. Therefore, it is critical that they receive constant, consistent, high-impact feedback on their progress, the results of their actions, and opportunities for additional insight. Feedback is provided so users can assess their current situation, analyze their options for moving forward, and measure the results of their actions. This feedback can take many forms, including mentors' advice and suggestions, real-world business results, and consequences (penalties and rewards) of decision-making, as well as more formal, evaluative feedback.

6. Maximum User Engagement

Simulation is designed so that users have an experience that is highly interactive, intriguing, emotional, fun, and satisfying. This is accomplished through many design elements, including graphics, video & audio, storytelling, grounded learning and recognizable environments. It can also be achieved through the deployment of simulation to foster the greatest amount of collaboration and engagement. For example, simulations can be done in a interactive team, or in a competition such as a wargame approach. Decisions on deployment to get the most out of the simulations can be made as part of the initiative or process design.

7. Access to Supporting Resources

One of the most significant features of simulation is the ability to access resources within the simulation or be able to link out of the simulation at frequent intervals for additional support and insight. This can take any number of forms, including text-based content, like articles and books; performance support tools, e.g., spreadsheets, templates, etc.; video or audio clips, webinar or presentation files; games; exercises; glossaries; or other web sites. In order to achieve the goals presented in the simulation, users will need a great deal of specialized knowledge, with multiple opportunities to gain and apply that knowledge and successfully complete the simulation.

8. Ties to Business Metrics

Simulations should be based on business issues and reflect business realities and corporate strategies and initiatives. To maximize the effectiveness of the experience, organizations should have a set of issue- or initiative-based business metrics. Effective performance in the simulation will mirror effective performance in the organization's business metrics. To put it in simple terms, measures of performance in the simulation should link to measures of performance in the real world. There are many ways to do this: one example is the use of a simulation Balanced Scorecard, which mirrors the organization's Balanced Scorecard; another way is to build the financial models in the simulation using actual company figures and models.

9. User-driven Experience

Progression through the simulation experience is primarily in the control of the user; that is, the user is not required to proceed through the simulation in a prescribed way. Users may answer a series of profiling questions at the beginning of the simulation to determine their role in the organization, previous knowledge, and media access, etc. Based on this information, the simulation may make recommendations on a course of progress; however, users are not obligated to follow these recommendations.

Most importantly, simulation does not require users to sit through page-turners or lengthy videos—unless, of course, they choose to. If users demonstrate proficiency in a topic, they may receive only reminder content, or might bypass that content altogether. This approach gives a high degree of flexibility—some users may prefer to go through the simulation in a highly structured fashion. The key is the flexibility of the simulation to accommodate a variety of styles.

10. Community

One of the unique features of online simulations is the ability to create global communities, through the use of chat rooms, threaded discussions, and issue-focused email groups. These communities allow users to easily get support from and share ideas with their peers, either within a single organization, or over the entire world. This extended community supports insight by providing real-life experiences and opportunities for collaboration and coaching. Within a simulation environment, these tools also allow users to compare notes and work as a team on a common problem.

Why is simulation a better approach?

- Well-designed simulations have capabilities that are far greater than that of other kinds of vehicles. For example, simulations offer the ability to:
- Accelerate the time to value of corporate initiatives;
- Anchor an initiative or a new business process throughout the workforce in a way that is fast, consistent, and compelling;
- Structure the experience to a user profile (by industry, initiative, role, function, team, learning style, previous knowledge);
- Give users access to vast, searchable amounts of information on the corporate intranet or Internet;
- Integrate with local and global communities (via chat rooms, threaded discussion, email groups), allowing for collaboration, interaction, feedback, and support from peers, experts, and coaches;
- Access other online performance support, including action plans, performance support tools, assessment tools, etc.;
- Evaluate user responses and suggest additional opportunities and practice options;

- Monitor simulation performance to gauge how well a team, unit, or organization is adhering to a new process;
- Report scores to a central repository for analysis and record-keeping.

Clearly, simulation's time has come. Its application within organizations is growing rapidly and its benefits are yet to be fully realized.

About BTS:

Founded in 1985 in Stockholm, Sweden, BTS is a fast-growing, entrepreneurial business consulting firm with a global clientele. Our mission: to support leading corporations in implementing change and profit improvements. By building knowledge and skills, sharpening business acumen and enhancing performance and focusing on profitability drivers, BTS helps its clients compete successfully in a demanding, global marketplace. Visit www.bts.com