Operations & Management

Success in creating the illusion of a complete and operating universe will depend in large part on the creativity and dedication of the people operating Universe Central. We should not expect such a large-scale process, even if it is mostly automated, to run by itself. Even if we could model the **Universe** using stochastic methods to generate and run everything, the result would be rather stale. Diversity would be limited by the variations that the programmers had built in from the beginning. Adding a human touch allows the system to be always going in new and unanticipated directions. It also enables the creation of play elements of a flavor that we simply do not know how to generate by machine.

I anticipate two sorts of roles to be filled by the people at Universe Central. These are *system developer* and *gamemaster* (or *GM* for short). These roles are not strict job categories; rather, they are the ends of a continuum. However, most members of the Universe Central staff will probably tend towards one role or the other.

The System Developers

The job of the system developers is to construct and maintain the underlying software that makes up the system (both Universe Central itself and the various software product sold to players for their home systems). This is an ongoing process because the definition of the **Universe** will constantly be changing as the GMs think of new things to do. In addition, the system load bottlenecks will likely shift around with changing fashions and the whims of the players.

The Gamemasters

The gamemasters are the "gods" of this particular **Universe**. They are an essential ingredient to successful day-to-day operation. They perform a number of important (and somewhat overlapping) functions:

First of all, they create the **Universe** itself. With the aid of various software tools, they design the "geography" of the **Universe**: the placement of star systems and the distribution of worlds and resources. They also create the creatures, alien civilizations, technologies, and artifacts that players will encounter in the course of various adventures and explorations.

Second, they operate a skeleton population of *non-player characters* who inhabit the **Universe**, helping to give it flavor and color. These *NPCs* will vary in complexity. Some will be two-dimensional automatons, playing "spear-carrier" roles, that are brought into existence at the press of a button and banished just as readily. Others will be fully drawn persons in positions of power, influence or interest, that operate just like player characters, except that they are controlled by the GMs for the purposes of Universe Central.

Third, they tinker with the contents of the **Universe** and the various goings on within it. They do this for a number of reasons: to keep up the pace, to maintain player interest, to balance unbalanced situations, and to generally see that every player gets a fair chance to have a good time. For example, if a particular player is getting too powerful in a region (perhaps threatening to take over completely and effectively drive other players out of the game) he may find one of his flanks being attacked by powerful, xenophobic aliens, thus diverting some of his resources and evening up the situation for the other players.

Fourth, through the mechanism of NPCs, they act as guides and teachers. They help orient new players to the **Universe**, while they lead more experienced players in the direction of entertaining adventures. In particular, they may create "sub-games" within the **Universe** to provide certain groups of players with goals and motivation.

Finally, they handle administrative matters, such as establishing new players and dispersing the "property" of players who drop out. This is done by the GMs so that the mechanisms by which a player deals with our organization can be folded into the game metaphor as much as possible. This makes the player's life more interesting and also helps to make the mechanics of the situation more transparent and thus enhance the illusion (i.e., the player knows that he is dealing with computers over the phone and with the corporate organization that is running them, but we don't have to rub his nose in it).

The GMs are to the **Universe** much as the costumed characters of Mickey Mouse, Donald Duck, and the like are to Disneyland. They give an extra dimension of "reality" to the fantasy.

A Plan of Attack

The establishment and operation of a system such as this one is unquestionably a large undertaking. To attain the full-scale **Universe** described above requires parallel effort in three broad (though overlapping) areas.

The first and most obvious area is the underlying system, both hardware and software. A suitable host for Universe Central must be specified and then either built or purchased as required. Appropriate target machines for the player systems also need to be chosen. The software to run both Universe Central and the player systems must be designed and implemented. This will require some research to determine the most effective ways to do certain things.

The second area of effort is the **Universe** itself. The characteristics of the fantasy need to be defined. The contents of the **Universe** must be created and installed in the database (with a prerequisite task being the design and implementation of the various interactive design tools that the creators will use). The various possible player roles must be specified and then the situation simulators corresponding to these roles must be implemented for the various target machines we choose to support. The operating procedures and guidelines for GM behavior must be written. The personnel for running the show (particularly the GMs) must be hired and trained.

The third area to attack is marketing and promotion. Marketing is more important to **Universe** than it is to many other software or home-entertainment products. The **Universe** requires a "critical mass" of players in order for it to be viable — for it to be the exciting and interesting place we want it to be. Playing most video games or other pieces of home-entertainment software is, by and large, a solitary pursuit. Interacting with the **Universe**, on the other hand, is in large respect a social activity. The vendor of the typical software product sells it and then forgets it. The primary interaction between the vendor and the customer takes place at the moment of sale. Part of the operation of the **Universe**, on the other hand, is an *ongoing* marketing and promotional effort. We have to keep the established community of players excited and interested and we need to maintain a steady flow of new players to counteract the natural forces of attrition and stagnation.

Each of these areas is large. Put them together and we have a vast amount of work on our hands. In order to avoid biting off more than we can chew, we must construct the **Universe** in stages.