There are four methods that may be utilised in implementing our solution. They are:

- Direct conversion
- Parallel conversion
- Phased conversion
- Pilot conversion

The following is a brief summary of each conversion method in the context of the Spice Hotel database solution.

**Direct Conversion**

Direct conversion is an implementation process that involves essentially “switching off” the current system entirely and “switching on” the new system to take its place all at once. The old system is no longer available for use from that point onward.

In the context of the database solution for Spice Hotel, this would mean shelving the old paper-based entry and lookup system entirely and have all users and participants use the new electronic database solution the next business day.

The recommendation would be not to employ this method of conversion, as the current and new systems are vastly distinct from each other. The greatest risk is the learning curve required by users and participants to interact effectively with the new system. Other major risks include the new system not performing as per the requirement report specifications, which will impact the business in a profoundly negative manner as the old system will no longer be available as a redundant failover.

The risks to the business of direct conversion far outweigh the financial benefit from simply switching off the current system and immediately replacing it with the new solution.

**Parallel Conversion**

Parallel conversion involves running both the current and the new system together for some period of time. At some pre-determined time, the current system is decommissioned entirely and all users and participants interact solely with the new system.

In the context of the Spice Hotel database solution; this will involve running the electronic database alongside the current paper based system. Information look-ups can be performed electronically on the proviso that the data entry is performed both electronically on the new system and via the current paper based system.

The advantage of this conversion method is that there exists some element of redundancy should the new system fall short of user/participant expectation or there is some catastrophic system failure with the new solution. The switch to the new system will occur at a time when EVERYONE is confident that the new system will perform the tasks it was originally intended for.

However, this conversion method is not without its disadvantages. First of all, there is the financial burden of running two systems concurrently. Secondly, there is double-handling of data and associated operations. Look-ups may be performed electronically, but data entry must be performed on both the current and the new system, which alludes to the third disadvantage, which is potential for data entry errors to occur as participants are entering in data electronically or copying data from the current paper-based system to the new electronic system. The users and participants would need to be very well trained in order to minimise such errors. Going from a paper based system to an electronic system is a significant step, hence the learning curve would also be as great.
Once again, in light of the fact that the disadvantages far outweigh the advantages, the recommendation would be NOT to employ a parallel conversion method when implementing the Spice Hotel database system.

**Phased Conversion**

Phased conversion involves a gradual introduction of the new system, while at the same time replacing elements of the current system until the current system is completely replaced by the new system.

This conversion method is arguably the least risk with respect to implementing the Spice Hotel database solution. The greatest disadvantage is the time necessary for complete conversion to occur, as element by element of the current system is replaced by its electronic counterpart. Alongside this gradual replacement, training must be ongoing to ensure that users and participants are well versed with the new system during its gradual implementation. Phased conversion is also relatively expensive as the system is implemented in stages as opposed to all at once (such as in direct conversion).

The greatest advantage however, is the reduced risk associated with the piecewise implementation of the new system. In the case of any system failures, the current system is still partly operational during the implementation phase, which means there is some fallback in the case of any unexpected performance issues with the new system.

**Pilot Conversion**

Pilot conversion involves setting up the new system for a small group of users and participants, while the remaining majority of users and participants still interact with the current system. At some pre-determined period in time, the pilot system is installed for all users and participants and the current system is then switched off.

Pilot conversion is ideal for certain scenarios, such as retail chains, where a new point of sale system can be installed in one store as a trial, and on success after a period of time, the system is rolled out to every other retail store. In the context of the Spice Hotel scenario, it is not part of a chain of hotels. The distinction between a phased conversion and a pilot conversion is blurred in this situation. Pilot conversion would not apply in this current situation.

**Recommendation**

The recommended conversion method would be a phased conversion, where the current paper based system is transposed with the new system, process by process. Testing and training would occur during the implementation of each new element during the implementation. The time taken for complete conversion would take a lot longer than direct conversion and more expensive, but the risk of system wide catastrophic failure is mitigated by the virtues of a phased conversion. Extensive training would be required as the current and the new system are diametrically distinct. With a phased conversion, the training could occur over an extended period of time as opposed to all at once.