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SMART CARDS IN LEISURE RESORTS

1. INTRODUCTION

In many leisure hotels and resorts, the guest purchases a complete package of services and access to various events and facilities offered by the resort. Frequently this package includes meals, shows, pool and seashore access, etc. In many cases, the services offered are not comprehensive, in which case the guest needs to pay for particular and individual services and privileges.

There are several problems and difficulties associated with payment for these individual services at leisure resorts. In most cases, the guest does not carry money on his person during his stay at the resort. Frequently this is due to the nature of his attire (a purse or wallet is inconvenient when dressed in a bathing suit). In other cases, he does not have bills in the local currency. In most cases the need to pay for drinks at the bar or during meals at the restaurant, towels or a beach chair at the pool, entry to the spa or fitness center, etc. is an embarrassment and inconvenience for the guests. At the same time, it is a bother for the staff, as they need to carry money and change on their person.

Retaining money at various locations on the grounds of the resort is a nuisance and frequently a hazard. This loose money becomes a target for petty theft on the part of both guests and employees. The need to handle it, transport it to and from the point of sale, count it periodically, receive money and give change are all a burden to the resort personnel.

Finally, there is invariably a situation I call "the last 12 hours syndrome". Frequently, the guest carries out the checkout procedure during the morning hours of his last day at the resort. During the check out, he is required to pay for any additional expenses he incurred during his stay. At that time he usually returns the key to his accommodations. Once he has paid and checked out, he does not exist as a customer of the resort. This means that he cannot use any of the resort facilities, can only purchase drinks for cash and is in an uncomfortable position while still on the premises of the hotel. This condition persists until his departure from the resort. As departures are frequently in the afternoon or evening, this condition of discomfort can last for many hours, and up to 12 hours following checkout.

During this time, he cannot enjoy the benefits of the resort and is, to all intents and purposes, an outcast. During that time, the guest is not a source of income to the resort, so that potential income, derivative of his access to the resort facilities, is lost.

The issues described above are common to most resort hotels, pleasure cruise ships and many other recreational centers.

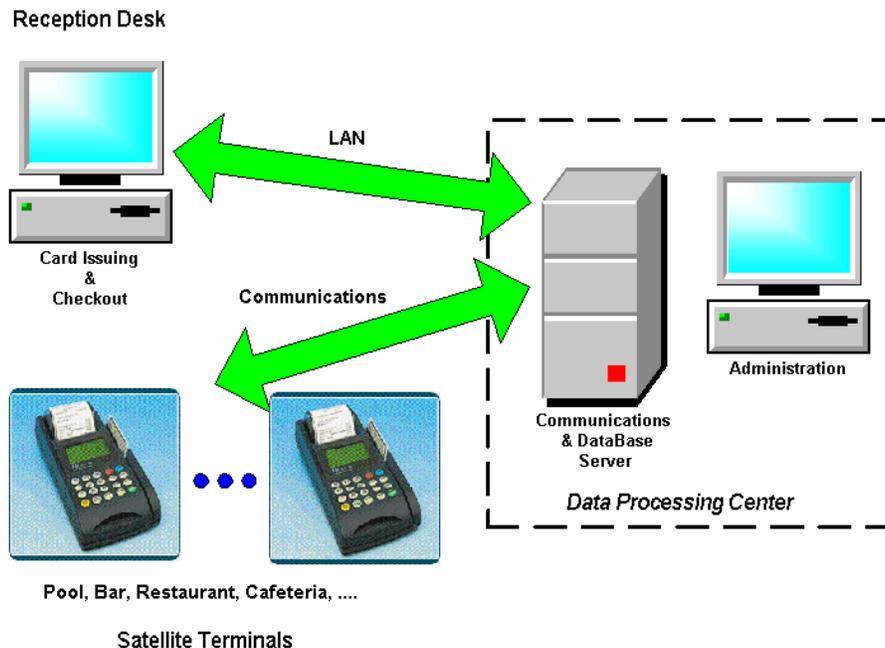
2. THE SMART CARD SOLUTION

The following is a proposed solution to the problems and difficulties associated with small payments during the course of a guest's stay at the leisure resort, as well as a solution to "the last 12 hours syndrome".

2.1 System Description

The solution is based on a personal smart card that is issued to the guest upon check-in. The card will contain the name and room number of the guest, as well as any other additional relevant information. The smart card system includes the following elements:

- A Data Processing Center.
- Point of Sale (POS) terminals located at all of the satellites. These include all of the outlets and locations where payment is made or privileges are taken advantage of.
- Issuing stations, normally located at the reception desks. These may also be associated with and serve the check-in and checkout procedures.
- Computer terminals for administration and reports.
- Smart cards issued to the guests.



Upon checking in, the guest is issued a personal smart card. He may then use the card to pay for services, establish his access and service privileges and serve as a means of identification. The card is presented at all points of exploitation, where it is inserted into the smart card slot in the POS terminal. Where relevant, the account associated with the card is debited. Thus, no money needs to be carried around on the person of the guest.

The system may be implemented in one of two main approaches. The determination which type of installation is optimal depends on the communications facilities available between the POS units and the Data Processing Center.

One method of implementation involves on-line communications between the POS units and the Data Processing Center. This on-line communications can be realised using existing telephone lines, dedicated communication lines between the satellites and the Data Processing Center, cellular communications or other radio connectivity. The common element associated with all on-line communication methods is that each POS can communicate with the Data Processing Center on a per-transaction basis.

The second method of system implementation involves off-line communications. In this mode, a transaction is performed in the POS terminal, and is not communicated in real-time to the Data Processing Center. Thus, the POS retains all information relevant to the transaction. Preferably, the POS has an internal telephone line associated with it. Using this telephone line the POS can initiate a communication session with the Data Processing Center. Periodically, the POS initiates such a session to download transactions to the Data Processing Center and to upload black lists, as described below.

2.2 On-Line Smart Card System

In this mode of implementation, the satellite terminals are all connected on-line to the Data Processing Center. Thus, all transactions are performed in real time versus the Data Processing Center.

The personal smart card issued to the guest at check-in includes his personal information, including room number. In addition to the personal information, the smart card will contain an electronic purse for use after checkout, as a solution to the “last 12 hours” problem.

Once he has check in, the guest may present his personal card at any outlet. The transaction is keyed into the POS, and then transmitted to the Data Processing Center. The guest may receive a printed ticket detailing the transaction for his records.

The Data Processing Center collects all of the transactions. When the guest arrives at the checkout counter, he can receive an updated statement including a list of all of his expenses.

At the checkout counter, the guest is invited to charge his card with an amount of money that will serve him during the remaining time on the premises, after checkout has completed. He may use the card at any of the satellites. Each time the card is presented, the electronic purse on the card is debited for the amount of expenditure. The card may be recharged at any reception desk or other authorised location. The electronic purse is protected by secure encryption methods, so that it may not be abused, duplicated or recharged by unauthorised persons.

Thus, the period of time that is currently non-productive from the point of view of the resort and uncomfortable from the point of view of the customer, can be made attractive to both parties. Just as an example, during this period the guest may take out towels and chairs to the pool, for a fee. This is a service that is frequently unavailable to him, and, more often than not, of little or no profit to the hotel.

When he is ready to leave, the guest can cash in the remaining balance on his card at any reception desk or other authorised location. The card itself will bear promotional information relating to the resort or hotel. It will remain in the possession of the guest when he leaves, a promotional reminder of his visit.

2.3 Off-Line Smart Card System

In this mode of implementation, the satellite terminals are all connected off-line to the Data Processing Center. Thus, all transactions are performed within the POS. Periodically, or when required, the POS will initiate a communication session with the Data Processing Center. During this session all transactions accumulated in the POS will be downloaded to the Data Processing Center.

The personal smart card issued to the guest at check-in includes his personal information, including room number. It also contains the departure date and time of the guest. In addition to the personal information, the smart card will contain, in this case, two electronic purses: one for use during the normal period of his residence, the second as the "last 12 hours" electronic purse described above.

Once he has check in, the guest may present his personal card at any outlet. The transaction is keyed into the POS, and retained there. The guest may receive a printed ticket detailing the transaction for his records.

The POS collects all of the transactions at the satellite. It initiates a communication session with the Data Processing Center at preset time intervals, or when the guest's departure time is imminent. Thus, when the guest arrives at the checkout counter, the Data Processing Center will already have been updated with the latest information relating to that person, and he can receive an updated statement including a list of all of his expenses.

As before, at the checkout counter, the guest is invited to charge his card with an amount of money that will serve him during the remaining time on the premises, after checkout has completed. In this manner, the "last 12 hours" electronic purse is put into effect.

3. ADDITIONAL FEATURES

There are numerous added values that can be incorporated into the smart card system described above. The following are a few examples.

3.1 Stock Management

The information passed between the POS terminals to and from the Data Processing Center may include stock information, where applicable. Thus, for example, the stock at bars and cafeterias may be monitored from the administrative computer terminals.

3.2 Role Call at Excursions and Trips

Each guest can enrol for excursions and trips by using his personal smart card. The Tour Guide will have a mobile terminal. The terminal will be loaded with the list of the guests that enrolled for the trip. At each stop, as each guest mounts the tour bus, he presents his personal card to the guide, who will pass the card through the terminal. Thus, the guide will have a current and updated report of who has returned to the bus and who is missing. The terminal can also serve to control exploitation of privileges by the guests during the trip (accounting for meals, for example).

3.3 Monitoring Resort Satellite Performance

The Data Processing Center collects all of the information on the volume of use and income generated by all of the satellites. The database can be used to generate information relating to the various aspects of satellite operation. For example, peak hours, most profitable time intervals and operational scenarios, demographic statistics and other aspects of satellite utilization, etc.

This information can be put to use to generate optimal activation and operation of the various satellites. This applies to bars, fitness centers, pools, water activities, etc.

For additional information, please contact:

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