

METHOD AND APPARATUS FOR CONDUCTING ELECTRONIC RETAIL FINANCIAL TRANSACTIONS

TECHNICAL FIELD

The present invention relates to a method and apparatus for conducting electronic
5 retail financial transactions. In particular, the present invention relates to a method
for purchasing airline tickets on hire purchase and associated apparatus.

BACKGROUND ART

Air travel is a widely used form of transportation enabling the population to travel to
various destinations for either business or pleasure.

10 The traditional terms and conditions for booking and payment of airline tickets
involves either a substantial deposit or full payment of the upfront costs.

The disadvantage of this method of payment is that it can limit the travel
opportunities for many consumers who have limited budgets or financial
restrictions. Also, consumers who purchase tickets via credit card or travel loans
15 often pay interest which increases their debt.

Also, traditional methods of payment where costs cannot be deferred on interest
free terms can often detract people from purchasing airline tickets. This can lead to
a loss of potential revenues for the airline and travel industries.

One such indicator is the shrinkage of large individual airline networks needing to
20 form alliances with smaller airlines or vice versa. Also, other factors such as
fluctuating operating costs, airport taxes, aviation fuel prices and interest bearing
credit cards affect even frequent flyers.

All of the above factors have caused ticket prices to soar way beyond the comfort
level for even frequent flyers, forcing many businesses to advise their employees to

restrict travel expenditure.

It would therefore be useful to have a synergy between the airline, travel and retail finance industries which benefits both individuals and businesses. International or domestic travel may then be an option for anyone who is interested in traveling,
5 rather than to only those consumers who can immediately afford to travel.

It would also be useful if there was a method that would allow consumers to book and pay for travel without paying interest on credit cards or travel loans utilising retail hire purchase schemes. This would inject more revenue for retail stores by way of a service fee. For example, retail stores survive on high sales through cash
10 transactions and rely even more on hire purchase sales, as consumers prefer the latter to facilitate financial management and spread or defer payments.

A typical prior art retail hire purchase system can be described as follows:

Retail stores are generally backed by strong financial companies like Pacific Retail Group, Retail Finance Service in New Zealand or other such financial institutions in
15 New Zealand or overseas. All of these companies have their databank filled with consumer information such as their payments and accounts etc. For any applicant the important aspect is to meet the credit criteria before an approval. Prime eligibility is given to citizens or permanent residents of the country or citizens of other countries who are considered by foreign policy agreements.

20 A hire purchase agreement is made between a financial company and a customer through a retail store. The retailer having received the required deposit agrees to hire the goods or services to the customer. The customer agrees to hire goods for the hire period and at the monthly basis. A first payment is usually made after 31 days of the agreement paid by each party over the fixed period of time (for
25 example, 12, 24, 36 months or deferred payment).

This agreement is governed by the terms and conditions tailored to cater the needs of the retail industry. The terms of the agreement set out are binding except where they may conflict with the legislation specific to an individual country. For example, New Zealand specific legislation includes the Hire Purchase Act, Credit Contract
5 Act or Credit Repossession Act.

A computer network is established between the retail store, financial institution and consumers. A typical example is when a consumer would like to purchase a television set on a hire purchase interest free deal. The client is asked to set up an account with the financial institution through the retail store, with a minimum 10%
10 deposit paid and a booking fee levy. The customer satisfaction is high as the consumer pays a minimum deposit and obtains the goods they desire for a fixed term interest free period. For the retail company, a steady income stream is available as monthly installments are provided by the customer (interest free deals vary according to the ongoing promotions). This process is outlined in more detail
15 below.

Firstly, a sales person checks if the customer has an account with the retail store, if so, it is processed for the required hire purchase amount. Thereafter a credit check is performed and is approved or declined online within minutes.

If the customer does not have an account then he/she is required to set up an
20 account by completing and supplying requisite documentation/information. For example, application form, passport, two forms of I.D., and bank statement for applying.

Here both retail store and financial institution correlate and exchange data to give the consumer the credit limit set by the finance institution for their hire purchase
25 based on the information supplied by the customer.

Generally this is how the present system operates and is a successful relationship that benefits all parties. It would therefore be advantage if there was a method for processing airline tickets that synergises the airline, travel and retail finance institutions while providing benefits to consumers.

- 5 It is an object of the present invention to address the foregoing problems or at least to provide the public with a useful choice.

Further aspects and advantages of the present invention will become apparent from the ensuing description which is given by way of example only.

- 10 All references, including any patents or patent applications cited in this specification are hereby incorporated by reference. No admission is made that any reference constitutes prior art. The discussion of the references states what their authors assert, and the applicants reserve the right to challenge the accuracy and pertinency of the cited documents. It will be clearly understood that, although a number of prior art publications are referred to herein, this reference does not
15 constitute an admission that any of these documents form part of the common general knowledge in the art, in New Zealand or in any other country.

- It is acknowledged that the term 'comprise' may, under varying jurisdictions, be attributed with either an exclusive or an inclusive meaning. For the purpose of this specification, and unless otherwise noted, the term 'comprise' shall have an
20 Inclusive meaning - i.e. that it will be taken to mean an inclusion of not only the listed components it directly references, but also other non-specified components or elements. This rationale will also be used when the term 'comprised' or 'comprising' is used in relation to one or more steps in a method or process.

DISCLOSURE OF INVENTION

According to one aspect of the present invention there is provided a method of conducting electronic retail financial transactions which includes:

- a retail software system,
- 5 • a financial institution, and
- an airline ticketing system

wherein the said retail financial transactions are for processing and purchase of airline tickets on hire purchase including an interest free period greater than 55 days provided by the said financial institution utilising the said retail software
10 system,

and said financial transactions are implemented through a network established between the retail software system, financial institution and airline ticketing system.

For the purposes of this specification the term 'electronic retail financial transactions' should be understood to mean the purchasing of products or services
15 through a retail outlet over electronic systems such as the internet and/or other computer networks.

It is envisaged that the retail software system will allow the exchange of first hand information within the retail company.

In preferred embodiments the retail software system may be Systems Applications and Products. For ease of reference this may now be simply referred to as SAP.
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More preferably, the retail system may be Systems Application and Products Enterprise Resource Planning Software (SAP ERP). However, this should not be

seen as a limitation on the embodiments envisaged for this invention. A number of retail software systems could conceivably be used with this invention.

SAP ERP application has become the software backbone supporting operational processes in all key retail areas such as sales and service. The result is a solution
5 that automates and streamlines business processes.

In particular, the sales and service functionality addresses customer – focused processes, from selling products and professional services to providing of service orders. It also supports the circulation of incentives and commission.

In preferred embodiments the retail software system may automate and streamline
10 a complete sales order process.

Preferably, the retail software may promote the use of profitable sales interaction channels including the Internet. This will reduce administrative costs, ensure high customer satisfaction and handle all commissions to develop and maintain effective incentive programs.

15 In preferred embodiments the retail software system may support all aspects of service order processing within the server organisation to improve uptime, yield and productivity.

Some of the advantages of utilising a retail software system such as SAP ERP are as follows:

- 20
- Increased number and quality of sales orders and reduced administrative costs by automating sales order management and using profitable net-based solutions like e-commerce;
 - Increased customer satisfaction by providing accurate, timely information; and

- Streamlined incentive and commission management activities to maximise productivity and boost sales.

For the purposes of this specification the term 'financial institution' should be understood to mean an agent that provides financial services for its client.

- 5 In preferred embodiments the financial institution may provide a service as intermediaries for arranging, transferring and providing funds for loans.

- Preferably, the financial institution may be established companies such as in New Zealand, Pacific Retail Group (PRG) or Retail Finance Service (RFS). However, this should not be seen as a limitation on the embodiments envisaged for this
- 10 invention as any other financial institutions could conceivably be used with this invention. The advantage of utilising established companies is that they already have their databank filled with consumer information such as applicant's details regarding accounts and payments.

- For the purposes of this specification the term 'airline ticketing system' should be
- 15 understood to mean a system for the issuance of airline tickets and/or travel packages used to represent at least the purchase of a seat or travel on a passenger airline, usually through a website or by telephone. The system also may include the issuance of paper tickets through traditional systems.

- In preferred embodiments an E-ticket may be issued once a transaction is
- 20 approved by the financial institution. Once a transaction is approved by a financial institution a reservation can be made and the E-ticket may exist as a digital record of that reservation in airline computers.

Preferably, consumers may print out a copy of their receipt which may confirm a record locator or reservation number and the E-ticket number.

The advantage of E-tickets is that they are a cheaper and more efficient method for airlines to deal with tickets. E-tickets eliminate the manual tasks required to process and account for paper airline tickets, and save the cost of other materials such as the ticket jacket. For the traveler, they eliminate problems and costs that
5 travelers experience when they lose a paper ticket. If a boarding pass is lost, obtaining a replacement is often as easy as approaching the ticket counter and giving the confirmation number for a new ticket.

Also, an E-ticket allows any passenger without luggage to completely skip the check-in counters and proceed directly to security. The option to check-in online is
10 available on airlines that offer this service. For example, a passenger can enter their confirmation number at the airline's website and print the boarding pass on their own printer.

Preferably, the E-ticket may include the option of purchasing travel insurance at the time of issuance.

15 For the purposes of this specification the term 'hire purchase' should be understood to mean a system including a legal contract in which a buyer is able to pay for a good or service on payment of a deposit and/or booking fee, the hire purchase contract allowing the buyer to obtain the good or service immediately, by entering
20 into a structured repayment scheme until the cost of the good or service has been paid in full. This hire purchase system includes an interest free period greater than 55 days. For ease of reference throughout the specification the term 'hire purchase' may now be abbreviated to HP.

In preferred embodiments the structured repayment scheme may include interest free periods ranging from 12 to 36 months. However, this should not be seen as a
25 limitation on the embodiments envisaged for this invention. The length of the

interest free period (of at least greater than 55 days) will depend on the agreements established with financial institutions/retailers.

Preferably, there may be a deferred payment option when the interest free period ends.

- 5 It is envisaged that this invention may include a credit card scheme similar to the GE Finance Money Card used in New Zealand to purchase retail goods on hire purchase.

- The advantage of an interest free hire purchase system is that it provides for situations where a buyer can not afford to pay the upfront cost for an airline ticket(s) but can afford to pay structured installments until a sum equal to the original full price and booking fee(s)/administration costs has been paid.
- 10

In preferred embodiments to be valid the HP agreement may be in writing and signed by both parties.

- It is envisaged the HP agreement will set out the following information in print that can be read without effort a correct description of the goods and services, the cash price for the goods and services, the HP price, i.e. the total sum including booking fee where applicable that must be paid to hire or purchase the goods or services, the structured regular installments and a reasonably comprehensive summary of the parties' rights.
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- 20 For the purposes of this specification the term 'network' should be understood to mean a computer network with at least two or more computers connected together using a telecommunication system for the purpose of communicating and sharing resources and information between the retail software system, financial institution and airline ticketing system.

In preferred embodiments the components of the network may include, but are not limited to individual computers which may be generally web servers or workstations (including personal computers).

5 Preferably, the workstations of the network may be configured with high-end displays, multiple CPUs, large amounts of ram, large amounts of hard drive storage space and other enhancements required for special data processing tasks or other resource intensive applications.

10 Preferably, the types of servers may include, but are not limited to file, print, mail, fax, telephone, proxy, remote access servers, application, web, database and back-up servers.

It is envisaged for this invention that there may be many other types of devices used to build a network such as internet hubs or repeaters which allow more than one computer to share the same network.

15 According to another aspect of the present invention there is provided an apparatus for implementing the method of conducting electronic retail financial transactions which includes:

- a retail software system, and
- an airline ticketing system

20 wherein the said retail financial transactions are for processing and purchase of airline tickets on hire purchase including an interest free period greater than 55 days provided by a financial institution utilising the said retail software system, and said financial transactions are implemented through a network established between the retail software system, financial institution and airline ticketing system.

There are many advantages associated with this invention:

5 • A synergy and infrastructure is established between the retail industry, travel industry and financial institutions thereby opening them up to market segments that have a large population, but remain un-accessible due to financial restrictions.

 • Financing of travel is made easier, simpler and hassle free as consumers pay over a period of time interest free as agreed in the hire purchase agreement. This system meets a variety of financial plans/situations.

10 • A method that can easily be incorporated into any retail store. For example, large corporate retail stores already have a longstanding customer base which have most of the applicants'/consumers' account details.

15 This lowers the administration and delivery costs for the retail industry and therefore consumers. Most retail stores will only require minor changes or additions to their present infrastructure to enable the purchase of interest free airline tickets in accordance with the present method.

20 • An infrastructure and network where all information can be shared between the retailer, financial institutions and airline industries. This allows checks to be placed to ensure correct transfer of information between entities. For example, back up security check (i.e. information in database (credit) can be compared with airline database to double check identity of traveler(s).

- Immediate increases in airline ticket prices for travel will not adversely affect consumers as interest free payments are spread out over a stipulated period.

BRIEF DESCRIPTION OF DRAWINGS

Further aspects of the present invention will become apparent from the ensuing description which is given by way of example only and with reference to the accompanying drawings in which:

- 5 Figure 1 shows a process chart of the schematic overview of a preferred embodiment of a method of conducting electronic retail financial transactions in accordance with the present invention which includes a computer network between a retail store, financial institution, customers and an airline ticketing system;
- 10 Figure 2 shows a process chart of a typical retail hire purchase system as known in the prior art; and
- Figure 3 shows a process chart of the airline hire purchase process of a preferred embodiment of the present invention.

BEST MODES FOR CARRYING OUT THE INVENTION

The invention is now described in relation to one preferred embodiment of the present invention as shown in Figures 1 and 3. It should be appreciated that this invention may be varied from the figures without departing from the scope of the
5 invention.

The overall process flow as shown in Figure 1 is enabled through a network of electronic systems (i.e. computers) and software such as SAP ERP between a retail company, financial institution and airline ticketing system.

The network and software i.e. SAP ERP are well known systems used in the
10 industry and the specific software details need not be disclosed further in this specification. Also, the airline ticketing system is an industry standard for the issuance of electronic tickets and the specific system need not be disclosed further in this specification.

Figure 2 shows a typical hire purchase process as known in the prior art and is
15 described in detail below for clarification and exemplification of this specification:

A customer approaches a retail store that has the necessary infrastructure to approve hire purchase agreements (2.1).

If they are an existing customer (2.2) a sales person enters the hire purchase account details and nominated dollar amount into the database for financial
20 institution loan approval on-line (2.3).

Once approved (2.4), the paperwork is completed by the sales person with the customer who agrees to the terms and conditions and enters into a legal contract (2.5).

The hire purchase is processed for the product bearing a SKU or bar code number (2.6) and the customer receives the product(s) and makes periodic payments on interest-free/deferred details (2.7).

5 If the loan for the existing customer (2.2) is not initially approved (2.4), the financial institution checks with the consumer verbally (2.4a) to verify their current financial status.

The financial institution re-calculates a financial package on-line and makes a decision whether this amended financial package with hire purchase option is approved (2.6a) or declined (2.7a).

10 If the hire purchase has been approved (2.6a), this leads to steps (2.6) and (2.7) as described previously.

If the customer is not an existing customer of the retail store, a hire purchase application needs to be completed by the new customer (2.2b).

15 This instigates the process knowledge base shared by the retail store and financial institution (2.3b), where they can check on credit criteria for new customers (2.4b).

The credit check performed is based on the completed paperwork and approval time depends on the on-line or manual (telephone, fax etc) queue system (2.5b).

The loan is either approved (2.6b) or declined (2.7b). If the hire purchase has been approved (2.6b), this leads to steps (2.6) and (2.7) as described previously.

20 Figure 3 outlines a method for a customer to purchase an airline ticket or travel package on hire purchase including interest free terms as follows:

A customer approaches the retail store for purchasing airline tickets utilising the hire purchase payment option (3.1).

The hire purchase terms in this invention will always include an interest free period greater than 55 days. It is envisaged that the interest free period term will range from the typical 12 to 36 month terms. Interest free terms are dictated by the retail store and financial institutions. A booking fee or deposit may be necessary
5 depending upon the terms of the agreement established with the retail store and financial institution.

If they are an existing customer (3.2) a sales person enters the hire purchase account details and nominated dollar amount into the database for the financial institution loan approval on-line. Approval on-line may occur within a few minutes
10 with the finance company and information of the customer's details only needing to be re-checked. It is also envisaged that loan approval can be via other communications such as telephone and fax.

Simultaneously while the preliminary hire purchase agreement is processed and approved, preliminary information of customer's details and proposed travel plans
15 along with a check of availability of flights or choice of travel package occurs via the airline ticketing system. Information of the customer's details are also transferred to the airline ticketing system. (This is shown as a dotted arrow at step (3.4b)).

Once approved (3.4) a further check is performed on the intranet portal between the airline ticketing system and retail store on ticket availability (3.5).

20 After approval and confirmation from both financial institutions and airline ticketing systems, the agreement is processed with the paperwork completed by the sales person with the customer who agrees to terms and conditions and enters into a legal contract (3.7).

Once confirmed by each party, the ticket and itinerary is processed (3.8) and faxed,
25 emailed or posted by the airline ticketing system to the retail store and customer

(3.9). This acts as an additional back-up if the customer is unable to contact the airline industry. They can also confirm travel dates and arrangements in the retail store.

A further option is that the original ticket can be collected from the airline outlet
5 before departure.

If the HP agreement for the existing customer (3.4) is not initially approved at (3.4), the financial institution checks with the consumer verbally (3.4a) to verify their current financial status.

The financial institution re-calculates a financial package and makes a decision
10 whether this amended financial package with hire purchase option is approved (3.7a) or declined (3.6a).

If the hire purchase has been approved (3.7a), this leads to steps (3.5) to (3.9) as described previously.

If the customer is not an existing customer of the retail store, a hire purchase
15 application needs to be completed by the new customer (3.2b).

For new applicants the necessary account application forms are filled out with two forms of identification (for example, passport and driver's licence) and a bank statement. A copy of this documentation is then emailed or faxed to a financial institution and approved in the allocated time. A copy of this documentation may
20 also be sent to the airline ticketing system if this necessitates.

The following steps (3.3b) to (3.7b) describe the same steps previously described in Figure 2 for a hire purchase application process for a new customer and need not be described further.

Aspects of the present invention have been described by way of example only and it should be appreciated that modifications and additions may be made thereto without departing from the scope thereof as defined in the appended claims.

WHAT WE CLAIM IS:

1. A set of computer executable instructions configured to enable a method of conducting electronic retail financial transactions for hire purchasing airline tickets, said instructions executing the steps of:
 - (a) receiving a request to purchase an airline ticket;
 - (b) applying for credit approval from a financial institution networked with a retail store;
 - (c) receiving hire purchase account details from the financial institution for loan approval;
 - (d) receiving credit approval;
 - (e) receiving airline ticket availability information from an airline ticketing system;
 - (f) processing a purchase transaction of airline tickets on hire purchase terms including an interest free period greater than 55 days provided by the said financial institution;
 - (g) issuing an airline ticket; and
 - (h) sending confirmation of airline ticket and travel itinerary to a customer.
2. A set of computer executable instructions as claimed in claim 1 wherein a software system includes instructions for exchanging first-hand

information within a retail company, the financial institution and airline ticketing system.

3. A set of computer executable instructions as claimed in claim 1 or claim 2 wherein the software system includes instructions for automation of a computer sales order process.
4. A set of computer executable instructions as claimed in any one of claims 1 to 3 wherein the software system includes instructions for supporting a service order processing within a server organisation.
5. A set of computer executable instructions as claimed in any one of claims 1 to 4 wherein an E-ticket is issued once a transaction is approved by the financial institution.
6. A set of computer executable instructions as claimed in claim 5 wherein the E-ticket includes an optional travel package.
7. A set of computer executable instructions as claimed in claim 5 or claim 6 wherein the E-ticket includes optional travel insurance.
8. A set of computer executable instructions as claimed in any one of claims 1 to 7 wherein a structured repayment scheme includes interest free periods ranging from 12 to 36 months.
9. A set of computer executable instructions as claimed in claim 8 wherein the structured repayment scheme includes a deferred payment option.

10. An apparatus for implementing a set of computer executable instructions configured to enable the method of conducting electronic retail financial transactions which includes:

- a retail software system, and
- an airline ticketing system

wherein the said retail financial transactions are for processing and purchase of airline tickets on hire purchase including an Interest free period greater than 55 days provided by a financial institution utilising the said retail software system,

and said financial transactions are implemented through a network established between the retail software system, financial institution and airline ticketing system.

11. An apparatus for implementing a set of computer executable instructions as claimed in claim 10 wherein the retail software system is Systems Applications and Products.

12. An apparatus for implementing a set of computer executable instructions as claimed in claim 11 wherein the retail software system is Systems Applications and Products Enterprise Resource Planning Software.

13. An apparatus for implementing a set of computer executable instructions as claimed in any one of claims 10 to 12 wherein components of a network include web servers,

14. A set of computer executable instructions configured to enable a method of conducting electronic retail financial transactions substantially as herein described with reference to and as illustrated by Figures 1 and 3.
15. An apparatus for implementing a set of computer executable instructions configured to enable a method of conducting electronic retail financial transactions substantially as herein described with reference to and as illustrated by Figures 1 and 3.