

## **Rajasthan State Beverages Corporation Limited**

### **2.4 IT Audit of computerisation of commercial activities**

#### **Highlights**

**The Company neither formulated a formal Information Technology policy nor any long-term/medium-term strategic IT plan.**

*(Paragraph 2.4.7)*

**Due to design deficiency, the system was not able to identify the stock of expired beer which led to sale of expired beer amounting to Rs. 20.21 lakh.**

**Due to design deficiency, the system could not ascertain the position of active/inactive stock lying in depots and therefore could not compute the demurrage.**

*(Paragraph 2.4.9)*

**Due to non-mapping of business rules and policy of the Company, the system accepted the supply of goods without linking to validation period.**

*(Paragraph 2.4.10)*

**Lack of proper validation checks resulted in acceptance of duplicate bank challans from retailers for delivery of goods and fraudulent transactions.**

*(Paragraph 2.4.14)*

**Lack of validation checks and inadequate input control made the system ineffective in ensuring the completeness and correctness of the data.**

*(Paragraphs 2.4.17 to 2.4.19)*

#### **Introduction**

**2.4.1** Rajasthan State Beverages Corporation Limited (Company) was incorporated (February 2005), in wake of the Excise Policy of Rajasthan for the financial year 2005-06, with the main objective to carry on business as manufacturer, producer, processor, grower, trader, buyer, retailer, wholesale supplier of rectified spirit, all kinds of alcohol and other spirits suitable for industrial use. The Company was provided with exclusive rights for sourcing and pricing of Indian made foreign liquor (IMFL) and beer in the state. The purpose was to make available proper quality and quantity of liquor to the consumers at a uniform rate throughout the state and to remove middlemen

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between manufacturers/suppliers and retailers so that the state could avoid revenue leakage.

The Company framed (March 2006) a Liquor Sourcing and Pricing Policy (LSP) under the Excise Act for carrying out its commercial activities. The Company operates its business activities through 39 depots in the State of Rajasthan. All depots have been equipped with IT infrastructure for performing their commercial functions. The manufacturers, both within and outside the state, keep their stocks in the Company's depots for distribution to the retail licensees for which the Company collects two *per cent* margin on the landed cost of IMFL/beer sold from these depots. The turnover of the Company was Rs. 734 crore and Rs. 1003 crore in the years 2005-06 and 2006-07 respectively.

The Company outsourced (March 2006) the online IT services from Tayal Software Consultancy Services (TSCS), Udaipur at a total project cost of Rs. 1.10 crore for procurement and installation of hardware equipment and for preparation of a web based application software for carrying out day-to-day operations for three years in the Company's Head office and its depots. The TSCS was responsible for maintaining integrity, security and backup of the Company data and applications. As envisaged, the commercial activities were to be carried out by developing five modules *viz.* i) Order Management System, ii) Sales Invoicing and Sales Accounting System, iii) Depot Inventory Management iv) Bank Reconciliation and v) Payment Module for cheque printing; using Oracle. The TSCS had not yet operationalised the Bank Reconciliation Module and Payment Module as of July 2008.

The system had a client server architecture with the server located at Udaipur. The head office of the Company and all its depots were linked with the main server.

#### **Scope of Audit**

**2.4.2** The scope included evaluation of controls in different modules of the application software and to ascertain completeness, regularity and consistency of the database. Further, the data (Oracle dump) for the years 2006-07 and 2007-08 (up to January 2008) in respect of all the depots was obtained and analysed using generalised audit software between February to May 2008.

#### **Audit Objectives**

**2.4.3** The IT audit of the commercial activities of the Company was aimed to ascertain:

- the efficiency, economy and effectiveness of the implementation and operation of the modules

- adequacy of IT control built-in
- mapping of business rules in the IT environment and
- business continuity plan/disaster recovery plan.

#### **Audit Criteria**

**2.4.4** Audit criteria, against which the evidence was tested for the purpose of arriving at audit findings and conclusions, were as follows:

- Best practices for IT system development and implementation
- Liquor Sourcing Policy for the years 2005-06 and 2006-07
- Accounting Policy, Business Rules and procedures followed by the Company and
- Rules, notifications and guidelines issued by the Excise Department of the State Government.

#### **Audit Methodology**

**2.4.5** Following audit methodology was adopted:

- Issue of questionnaire based on the scrutiny of records and management's response/clarification there upon
- Analysis of the data (Oracle dump) for the years 2006-07 and 2007-08 (up to January 2008) in respect of all the depots using Computer Assisted Audit Technique (CAAT) and
- Discussions and interaction with the officers of the Company and the TSCS.

#### **Audit Findings**

**2.4.6** The audit findings concluded as a result of test check of the system and records are as under.

## **General Controls**

### **2.4.7 Lack of IT strategy and policy**

The Company had not formulated a formal IT policy and any long term/medium-term IT strategy for implementation of IT applications in a systematic manner.

In reply, the Management stated (September 2008) that in January 2006 the Company had decided to replace the wholesaler system with retail licensees with effect from April 2006 and to cater to a huge clientele, online IT solution was essential. It was further stated that the system was implemented successfully as scheduled. The reply was not acceptable in view of the fact that the Company did not give detailed thought to the key elements of the IT strategy such as policy making, funding, support required for development, arrangements, internal infrastructures *etc.* Moreover, even after two years of switchover to IT system, the Company did not formulate its IT policy which may help in ensuring consistency of plans, business policy and its strategy.

### **2.4.8 Project planning and documentation**

The work of preparation of a web based application software for carrying out the day-to-day operations for running commercial activities of the Company was awarded (March 2006) to the TSCS without preparation of any perspective plan. After award of work, a sub-committee was formed belatedly (June 2006) to identify, justify and analyse the activities of the Company, which were to be computerised. The documents such as User Requirement Specifications (URS), System Requirement Specifications (SRS), change management policy and manual of the IT system were not prepared. The testing and acceptance of the application software were also not found on record.

In reply, the Management while accepting the audit observations stated (September 2008) that due to shortage of time, instead of putting efforts on studying, documenting, verifying and reporting, the Company had intensive and dedicated interaction with the service provider to develop and implement the system. It further stated that the user manual was under preparation. The reply was not convincing as in absence of proper documentation, change management controls could not be ensured in audit which may result in accidental or malicious changes in software and data.

## **System design**

### **2.4.9 Drain-out of expired beer/ Demurrage charges**

Rule 9.6 of LSP stipulated that any stock of beer lying unsold for a period of six months from the date of bottling or stock declared unfit for human consumption at the depot should be drained out by the Company. Any expenditure incurred by the Company should be recovered from the

manufacturers and no compensation was payable in respect of such stock. In case where such beer was not drained out at the depot itself and the breweries were allowed to take the old stock of beer back to their factories, the Company's margin at the rate of two *per cent* plus demurrage was to be recovered from the supplier. While approving the brands of beer, the Excise Department had clearly instructed the manufacturers that brand labels could be used only after indicating the batch number, date of manufacturing and date of expiry.

For optimum utilisation of storage capacity, LSP provided that stock more than 60 days and 120 days old, of beer and IMFL respectively, was to be categorised as 'Inactive stock' and a demurrage of Rs. 2 per carton box per day should be charged against. The demurrage charge was to be computed once a month and adjusted against the payment due to the manufacturers.

Audit, however, noticed that the system did not have provision to capture the date of bottling of beer and the batch number of carton boxes of IMFL/beer. Due to these design deficiencies, the following discrepancies were noticed:

- The system was not able to assess the position of stock of expired beer at various depots of the Company. It infact sold out expired beer amounting Rs. 20.21 lakh to the retailers during the period 2006-08.
- The system was not able to capture the quantity of active/inactive stock.
- The system could not charge/adjust the demurrage amounts from the payments to be made to the manufacturers, though as per proviso of Rule 11 of the LSP, the Company was to pay to the manufacturers only for the stocks sold after deducting the demurrage charges, interest *etc.*
- The Company allowed three manufacturers<sup>1</sup> to withdraw their stock of IMFL worth Rs. 63.81 lakh during 2006-07 but failed to recover demurrage charges as the same could not be ascertained.
- It could not be ascertained whether the stock was issued at the depot level correctly on first-in-first-out (FIFO) basis as per the policy of the Company.

While accepting all the facts the Management stated (September 2008) that there was no provision to insert batch number/date of manufacturing in the software. The assessment of the active/inactive stock was being done on the basis of inward of the goods at the depot.

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<sup>1</sup> Ranger Breweries Limited, Herbertson Limited and Shaw Wallace Distilleries.

## Mapping of business rules

### 2.4.10 Validity of Order for supply (OFS)

The LSP stipulated that the manufacturer should complete the delivery of items within a validity date indicated in the OFS and in case of his inability to supply the quantity within the validity period, the OFS shall lapse automatically. Further, as per provisions of the LSP, the Company could extend the validity period by charging the prescribed fee. The Company allowed delivery period for supply of IMFL/beer up to 10, 15 and 21 days to manufacturers (distillers/brewers) situated in Rajasthan, Punjab and Southern remote states respectively.

It was observed that a check with reference to the validity period was not built into the system where users could enter any number of days for the validity period. Non-mapping of the business rules with reference to validity period led to deficient control of the supply from manufacturers as per the OFS *i.e.* beyond the validity period without any extension fee. It was further noticed that charging of fee in case of extension of validity period was also not made a part of the software. In case of 55 orders for supply (OsFS) during the period of 2006-08, the initial validity period was allowed for more than 21 days without any extended validity.

While accepting the fact the Management stated (September 2008) that charging of fee against validity extension was not a part of the software. It, however, stated that in no case the extended validity was allowed at the initial stage. The reply was not convincing as in 55 OsFS, the validity period was allowed up to 30 days at the initial stage itself.

### 2.4.11 Sale of IMFL/Wine in loose bottles

The Company issued instructions to the depot managers (May 2006) that all brands of wine and costly brands of whisky and other IMFL costing Rs. 800 per quart<sup>2</sup> or more could be sold in loose bottles. The cheaper brands of IMFL and all brands of beer were to be sold in Case Bags (CBs) only. The condition was relaxed to the extent that in case of damages/short filled bottles, the same could be sold in loose bottles.

Audit, however, noticed that adequate provision has not been made in the system to identify the IMFL/wine costing less than Rs. 800 per quart. Further, no validation check was available in the system to avoid generation of invoice of items in case these were sold in loose bottles even though their prices were less than Rs. 800 per quart and sufficient stock was available with the depot.

In reply (September 2008) the Management while accepting the absence of such check in the system stated that there was no necessity for putting such check as the policy could change from time to time. The reply was not acceptable as non-mapping of the business rule with reference to costly brands of whisky and other IMFL may lead to ineffective organisational control.

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<sup>2</sup> Quart- bottle having liquor quantity of 750 ml.

#### **2.4.12 Credit sales**

As per policy of the Company, the retailer was required to deposit the amount in any of the recognised banks through challan and produce a copy of the challan at depot for purchase of IMFL/beer from the depots of the Company. Further, the system also provided that the amount of invoice for sale of IMFL/beer should not exceed the credit balance of that retailer.

Analysis of data, however, revealed that during the audit period, 24,398 (2006-07) and 20,358 (2007-08) instances of credit sales worth Rs. 29.67 crore and Rs. 19.17 crore were permitted through system. Further analysis revealed that at the end of the year 2006-07, Rs. 27.19 lakh was outstanding against 210 of the above retailers.

Thus non-mapping of the business rules for credit sales led to generation of invoice without reference to the credit balance of the retailer.

In reply, the Management stated (September 2008) that some retailers forged the amount in challans and lifted the material. The fact remained that the system accepted the sales in excess of the credit balance of the retailer.

### **Application controls**

#### **2.4.13 Input control and validation checks**

To ensure correctness and completeness of the data it is necessary to ensure appropriate input control and data validation. The following shortcomings were noticed in audit regarding input control and data validation.

**2.4.14** The Company got printed the bank challan slips of each of its three banks<sup>3</sup> for each financial year with unique alpha-numeric challan number of seven digits including the bank code. Audit, however, noticed the following discrepancies:

- The system did not have appropriate input controls to identify the alpha-numeric characters of the challan numbers and also to ensure the complete code was entered. In respect of 3,942 records, the module had accepted entry of challan numbers even though the first letter of challan number denoting the bank name was missing and/or the challan number was having less than seven digits.
- The system also accepted the entries of the same challan number more than once. 1,943 and 8 numbers of duplicate challans were noticed in the same year during 2006-07 and 2007-08 respectively. In 6,158 cases the system accepted same challan numbers in 2007-08, which were already entered in the year 2006-07.
- In 2006-07, one retailer deposited Rs. 30,000 in UCO Bank, Jaipur and

<sup>3</sup> Punjab National Bank, Bank of India and UCO Bank.

using the same challan, fraudulently, he took delivery from two depots viz. Jaipur (Sikar road) and Jaipur (Ajmer road) of the Company. Further analysis revealed that two retailers had taken the delivery from two different depots (Ajmer depot and Ajmer Makhanpura depot) against the same challan number on different dates (5 May 2006 and 14 June 2006) whereas the amount was found credited only once in the Company's account. Similarly in the year 2007-08, two retailers of Jalore depot had taken the delivery of stock worth Rs. 96,000 on two different dates against the same challan without depositing any amount.

Thus, lack of inadequate input control and validation check in the system led to acceptance of fraudulent transactions.

In reply, the Management stated (September 2008) that in the financial year 2005-06 challan slips used were unnumbered and the same were in use in financial year 2006-07 also with jumbled numbers. Thus there was no check on restricting duplicate challans during that period. The reply was not acceptable as the system was accepting the entries of the same challan number more than once and did not have appropriate input controls to identifying the alpha-numeric characters of the challan numbers.

**2.4.15** As per Section 206-C of the Income Tax Act, 1961, tax collected at source (TCS) at the time of sale of liquor from depots is required to be deposited on 7<sup>th</sup> of each month furnishing Permanent Account Number (PAN) of the retailers. The Company issued (May 2007) instructions to the depot managers to ensure compliance of these provisions.

Audit, however, noticed that the PAN was not being entered into the system. Further, the system has no validation check and generated the invoices for sale even in absence of PAN of the retailers.

In reply, the Management stated (September 2008) that the system had proper provision for recording the PAN of licensees. The reply was not acceptable as the system was generating the invoices for sale even in absence of PAN of the retailers as a result of inadequate input control.

#### ***2.4.16 Absence of permit number***

Excise Department of Government of Rajasthan had allotted a licence (permit number) to each retailer of wine shop for each financial year. The permit numbers were, however, not being entered into the system. Audit noticed that the invoices were generated without entering permit numbers in respect of 2,61,342 records in the year 2006-07 and 3,22,945 records in 2007-08. Thus possibility of sale of the IMFL/beer to unauthorised retailers could not be ruled out.

In reply, the Management stated (September 2008) that the Company's software includes only licensees approved by the Excise Department; hence, there was no possibility of sale of the IMFL/beer to unauthorised retailers. The reply was not acceptable as the assertion of the Company was not

sufficient in view of absence of the adequate input control and invoices were being generated even without entering permit numbers.

**2.4.17** The date of material inward slip<sup>4</sup> (MIS) and other dates like date of OsFS and lorry receipt date were not validated in the system. The following discrepancies were noticed:

- 15 and 3 instances in the years 2006-07 and 2007-08 respectively were noticed wherein the OsFS dates and receipt dates of stock at depots were the same, which indicated that the OsFS were issued after arrival of stock at the depots.
- During the year 2006-07, 29 instances were noticed where the material at the depots was shown as received even before the date of issue of OsFS. In some cases the delay was more than one month. Similar instance was also noticed in the year 2007-08 in Udaipur depot.
- In 69 material inward slips (MIS) in the year 2006-07 and 53 MIS in 2007-08 the date of arrival of vehicles was subsequent to the date of preparing the MIS.

The Management accepted (September 2008) the fact that there was no validation check on the date field.

**2.4.18** As per the Rajasthan Excise Rules, 1956 every manufacturer of country liquor, IMFL and beer shall have to obtain approval of the labels (irrespective of size *i.e.* quart, pint or nip) of their brands intended to be manufactured or sold in Rajasthan every year from the Excise Commissioner. Audit noticed that the date of invoice was, however, not validated with reference to the date of approval of brand. Thus, in the year 2007-08, 11,797 invoices of 79 brands for sale of liquor/beer were generated from different depots of the Company before approval of these brands by the Excise Department.

In reply, the Management stated (September 2008) that to clear the available stock with the depots, sale invoices were issued notably for those suppliers to whom some amounts of demurrage charges *etc.* relating to earlier years were outstanding. The fact remained that the system did not have any provision to validate the brand approval date while generating the invoice for sale of stock.

**2.4.19** There was unique number coding for OFS (issued at HO level) and MIS and invoice for stock sold (at depot level). The system, however, accepted the same numbers which had once been entered for the OFS, for the MIS and for the invoice for stock sold and thus the following discrepancies of duplicate records were noticed:

- There were 68 records of duplicate OsFS numbers during 2006-07.

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<sup>4</sup> As per procedure the material inward slip (MIS) is prepared on the date of arrival of a lorry load at a depot, after verification of documents and unloading of the goods.

- In the year 2006-07, two records had the same MIS serial number in Nagour depot.
- In the year 2006-07, 26 invoices were issued on different dates with the same invoice numbers.

Thus, absence of input control and validation checks led to presence of inconsistent and incorrect data in the system.

In reply, the Management stated (September 2008) that in some of the depots, documents like MIS and invoices were not created 'on line' at initial stage of implementation of the software due to poor internet connectivity with them. Thus, while entering the MIS with 'Manual' option the same MIS serial numbers were used in Nagaur depot. It was further stated that the brands of both the MISs were properly incorporated into the stock of the depot. The reply was not acceptable in view of the fact that no validation check was incorporated in the system to avoid such discrepancies.

#### **Other issues**

**2.4.20** The following discrepancies were also noticed in the modules:

- The excise fee at the rate of Rs. 4 per bulk litre was to be collected on IMFL and Indian made beer. It was noticed that in respect of 31 records pertaining to 16 depots and one record pertaining to Jaipur-Ajmer road depot in the year 2006-07 and 2007-08 respectively, the excise fee was not indicated in the data.
- Scrutiny of the closing stock of IMFL/beer revealed that the closing balances of 214 items in the year 2006-07 were more (ranged between 2 and 3,551 case bags) than the physical quantity available in the depots of the Company. Accordingly, the balances physically available with the depots were entered in the database in the next financial year.
- There was a parallel system in the Company with regards to maintenance of accounts. Audit noticed that the amounts payable to or receivable from suppliers as depicted in the balance sheet were different than the balances shown in the database. Allowance of parallel system indicated that the Company did not rely on its database.

#### **Conclusion**

**Any computerisation effort has to be supplemented by adequate controls to ensure appropriate system design, mapping of business rules correctly and confidentiality, integrity and reliability of data. The computerisation of the commercial activities of the Company, started in March 2006, was not complete as two important modules viz. Bank Reconciliation Module**

and Payment Module were not made functional. Database was unreliable due to deficient system design, incomplete data capture from manual records, deficient input controls and validation checks. The system, thus, was deficient and posed the risk of fraudulent manipulations, loss of revenue and incorrectness in the accounts of the Company. The Company, thus, did not completely rely on the system and maintained a parallel system. This defeated the objectives of the computerisation in the Company.

### Recommendations

#### The Company:

- Should develop and maintain complete documentation of various stages of development like User Requirement Specifications, System Requirement Specifications, User manual *etc.*
- Should make suitable modifications in the system design to capture the stock of expired beer and inactive stock.
- Should aim for incorporating all its rules and policies into the system like OFS validity, cash sales *etc.*
- Should build in the input controls and validation checks into the system like validation between dates, to prevent duplicate entries and to ensure complete and correct data entries; and
- Should formulate a clear and comprehensive IT policy.