Sp-Fs Technique in Sole Proprietorship Using Agent and Multi-Agent System

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ABSTRACT

Bitcoin under Blockchain mechanism implemented with Oligarchic Control of Business-To-Business taken into notification to introduce a new approach named SP-FS technique. SP-FS (Sole Proprietorship Financial Strategy) technique implemented to solve problem raised to single business man runs number of different companies under one Proprietor called Sole Proprietorship. The businessman has full knowledge of every important things or a value of each company like company updates, product details, growth strategies, timelines, etc. Bitcoin under Blockchain used distributed system to maintain data which supports banks, corporate, institute with multi branches of same company. SP-FS technique focused on proprietor who has number of different business under Sole Proprietorship. The need of Sole Proprietor is to calculate the financial strategy of companies under his own Proprietorship to identify his financial status. This method used to get the business growth of individual companies. The automatic system implemented by SP-FS technique helps to reduce the time taken by proprietor to calculate the overall financial status. Cost expensive to maintain memory resource of existing system reduces with the help of SP-FS technique centralized parallel memory allocation method on network server. The security issues faced by cryptographic method and less ownership authentication check overcome with proposed system security measure. Instead of transaction ledger data maintenance method authorized shared memory between all companies transaction details maintained in SP-FS technique to protect loss of data. The main objective of this thesis is to automate the financial calculation done by Sole Proprietor to calculate and maintain no of different company's financial strategy. It also focused on centralized secured memory storage.

Keywords : Arduino, Wi-Fi (ESP 8266), Load cell, Database System

I. INTRODUCTION

1.1 Introduction about Agent and Multi Agent System

Agent also called as "**Software robot**". It performs various actions continuously on behalf of an individual or organization. It defined as an analytical method to build computer programs. It helps to get idea about exact operation takes place in automation programs. It contains of nodes and network relationship to strengthen the protection of intellectual property rights. Agent acts as an interface between automatic system and user to store user data for future transaction. Agent based modeling deals with behavior of complex system with the help of agent interaction on its environment using simple rules to gain widespread popularity over many areas.

Users in open and distributed environment use computer based automation program to solve complex are called Agent. The number of agents work together to complete complex program task are multi-agent. A software agent have knowledge to prevent or have solution to problems beyond individual agent through network are mentioned as Multi-agent system problem solving method.

Multi-agent System is a problem solving entities of agent which works together to find answers to problems that are beyond the knowledge of each agent. It is coordinative among individual agents. It secures database data.

Multi-agent means multiple computerized interactive agents combined within an environment to perform certain task. The agent may be an intelligent agent, because using intelligent agent we can easily work with either system application or web-application. System application dealt with computerized system work with in system implemented environment, but Web application centralized the server all over. One can retrieve data from anywhere at any time.

Agent and Multi Agent system follows computational models of computer programs in which involve some independent variables as inputs and some as outputs (Macy & Willer, 2002). One of its major advantages is relatively easy to model theories about processes. This kind of model is defined as Intelligent Agent. Intelligent agent can permit to perform independent automated task which is interactive to user environment. Multi-agent technique is not always same as agent technique. To overcome some of the difficulties handled by agent, multi-agent system introduced example instead of using simple rule algorithm in agent model it is easy to implemented complex engineering based algorithm through multi-agent model. Too large or complex algorithm split behavior into simultaneous subsequent agent and collectively combined and controlled by multi-agent. Multi-agent includes appropriate application over online for trading or to centralize all behaviors activity under one control.

Some the fields where agent model techniques implemented are Information Management Agent by Bradshaw at 1997 - which helps to selectively retrieve appropriate agent, Personal Assistant Agent by Bradshaw at 1997 - Provide Personal algorithm for task, Interface Agent by Jennings and Wooldridge at 1998 - Information about Learn to perform tasks for owner, Web Browser Agent - Used to Customize websites automatically, Broker Agent by Lohani and Jeevan at 2007 - Helps to match user request to know solution from database, Data Mining Agent by Ralha at 2009 - Used to search data in vast database, Network Management by Ralha at 2009 - Provide collection of Information about Collaborative agent, Commercial

Application agent by Patel et al at 2010 - Contains details about Trading, Financial assistant intelligent agents.

Some the fields where multi agent model techniques implemented are Strategic Power infrastructure defense by B Sart-Tilman - Computerized failure analysis of Power communication, Air-defense System by J Wang - System of System for surface warship formation, Adaptive Cooperative Defense by Kotenko - Security simulation network attacks and defense, Grid Computing by R AI-Khannak - Used to manage network energy.

Some of the application where multi-agent system implemented listed as military demining, military logistics, aircraft, stock based financial management, book data maintenance system, etc.

1.2 Problem Statement

A problem statement is a clear picture about issue that needs to solve by the problem solving team. Existing approach deals with risky cryptocurrency bitcoin method. It is totally decentralized. It is not possible to control centralized financial transaction institute under this approach. It is modern payment method with some trafficking of illegal substance, because third party can directly access public ledger maintaining transaction details with cryptographic random number without ownership authentication.

Existing approach directly deals with financial institute for bank transaction, collect fee for cryptographic transaction method. Bitcoin and blockchain approach refugee emergency response to do transaction over network, due to cryptographic check. This approach needs of high memory resource. The proposed system need not go with direct transaction over financial institute it maintain all transaction details through independent agent and data are centralized with help of parallel computing method over network. It is secured with ownership authentication.

In nature there are too many known and unknown complex factors creates problem in these systems. Transaction detail at first time the security measure gather all ownership information, while use existing system again it simple do transaction with the authentication check with cryptographic random number received by any of the specific mode to user.

There was no exact block chain mechanism to clear financial problem. It takes two steps to process the complete task. Once if transaction starts it check authentication then move the data for transaction. Till transaction in process data maintain in ledger as temporarily. If once transaction successfully completed it store transaction detail permanently. The cryptographic random number generated by financial institute reached customer as message.

One issue related to existing bitcoin and blockchain financial application of the traffic simulation is common to all modeling techniques: a model has to perform calculation to satisfy purpose of task started. A successive model has to be built at the right level of description and right amount of detail to serve its purpose. Next issue is about agent toolkits. There is lot of agent based toolkits included to perform with a large number of agents which drops the speed executions are considerably. Some of those tools are not designed to solve simulations issue.

1.3 Objective of the Thesis

The main intent of this thesis is to centralized data used by different business under sole proprietorship. It helps to monitor the complete financial growth and updated financial status of proprietor. The main objective is to reduce time taken by the proprietor to calculate overall financial information followed by different business.

The computerized automation system done for SP-FS technique helps to retrieve individual business information or collaborative from shared memory as per proprietor requirement. It also secured using login or ownership authentication. The multi agents involved in this technique can able work over their individual business data. Only the proprietor has the rights to do updates over financial details for security measure. Web based Integrated Development Environment (IDE) tool used to develop SP-FS approach as web application to maintain its data over network.

II. METHODS AND MATERIAL

Existing System

Bitcoin and blockchain is a digital payment method followed by banking sectors. It contains third party architecture to work over with this technology. The

third party may be any person performs transaction over bank, so it needs high data security. The security problem overcomes by implementing cryptographic method of random password generation. It results work delay. Actually in existing system the data are processed through independent distributed memory, which need high memory resource.

After transaction takes place specific data triggered the transaction to ledger for future reference. Chargeable transaction method handled by financial institute. Transaction ledger is public access over network. No ownership verification check takes place before perform transaction over network. Third party can easily broke out the cryptographic key. It seems to security lack.
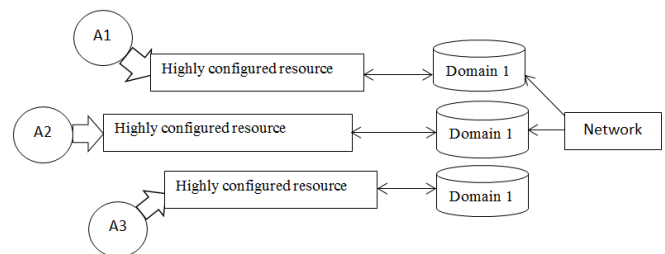
Figure 1 : Existing system resource sharing method

Bitcoin and blockchain methodology can perform exact transaction details about company with different branch office. When implementing same technique with different business in sole proprietorship, it deals inconveniences.
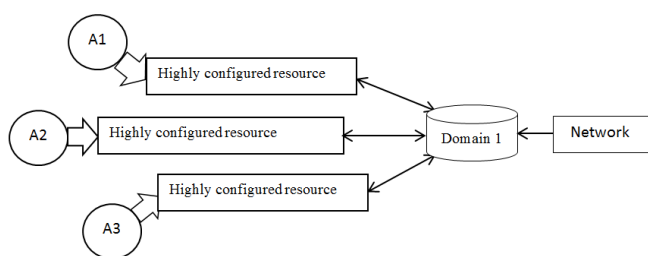
Proposed System

SP-FS technique was developed to optimize data and other resources used to calculate financial status of business-to-business transactions. This system has both parallel and distributed memory sharing mechanism together to combine different process under one authentication control. In addition, centralized data sharing algorithm used to calculate business financial strategy report. SP-FS technique transmits data to domain through web application.

In web server data are stored with required information need to retrieve financial status as individual or collaborative. The fields like company id, name, financial month and year with turnover amount are included in database table as common entities. All the

above entities are commonly required by agent and multi-agent to perform data transmission over network. Distributed multi-Agent architecture used in SP-FS technique, have its separate system and processor for individual agent to store and maintain communication details, achievement details, customer information and financial data need by Sole proprietor.

Parallel Agent architecture used in SP-FS technique allowed to access individual business or overall business financial status to agent after satisfied valid authentication login. Domain in web application acts as centralized memory sharing resource where agent and multi-agent powered data for future reference.

Figure 2 : Proposed system resource sharing method

Proprietor can monitor and control their business at anytime from anywhere. SP-FS business centralized technique help proprietor to maintain his business growth ratio high. Proprietor can analysis business growth ratio down along with its duration helps him to take safety measure to grow up business financial state.

Proprietor gets clear graphical report to think which of his business need more financial support than other businesses and need to take more attention to reach satisfied financial growth. Proposed system performs business to business financial calculation by computerized method to retrieve accurate result. It saves time taken to perform large financial calculation easily.

Architecture Diagram

Architecture diagram explained about SP-FS technique and its advantages in detailed. SP-FS is a Sole Proprietorship – Financial Strategic technique contains Multi agents Agent1, Agent 2 and Agent 3 as Institute, Driving School and Infotech business maintained by single proprietor as authenticated Agent.

All three businesses differ by its service, product and financial status. It is difficult for proprietor to perform calculation to get actual outcome from overall business by monthly or yearly based. It also not that much easiest task to track the current financial strategy of the required business without moving to the location where the business place located. This issue can be overcome with the shared memory used to maintain data as centralized for accessing. Through web application agent can access required data from memory resource to perform accurate calculation required as per agent need. Here domain is an intermediate or coordinate point to create communication path between agent and multi-agent involved in process.

An independent agent combined together as multi-agent has rights to maintain their data entry. The Agent called proprietor can has actual authentication to modify, view or to calculate financial strategy of all business.

IDE designed for this mechanism has independent login for each business. Only that business status and data are possible for that particular agent, who access database through that agent remain are hidden to their knowledge.

Example:- Agent(Institute) login the web application to entry today information, the web pages and links related to Institute are only accessible by them there web pages designed to maintain Agent(Driving School) and Agent(Infotech) are hidden. But the Agent (Proprietor) has the rights to view all there Agents information through his web application.

The above method solves the issue raised for resource requirement in an existing approach.
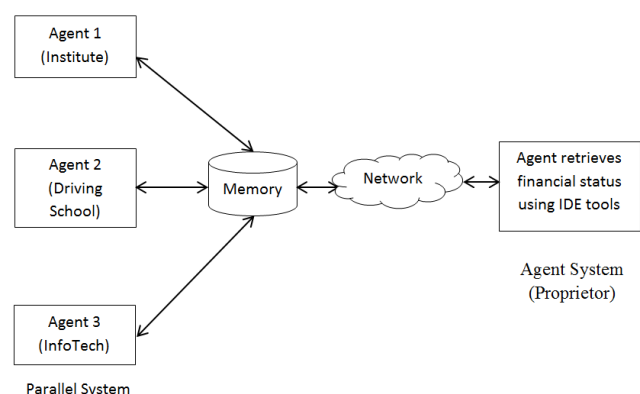
Figure 3: SP-FS Architecture

Design and Implementation

Design and Implementation chapter contains clear information about awareness of the problem. Some level of automation modeling tools like CASE. It is one of the software engineering tool which helps to maintain data in database. User need interactive environment to work with data as frontend. So, Java web application JSP is used to implement system design. Netbean is free and open source IDE, which is written in Java language and provides all kind of automation application.

Netbean JDK and UML supports to develop the secured and identify-enabled web services. The data entered in application transfer to web server through network using HTTP protocol. For each request from client, it waits for its response from the server. Request to server transfer data from user environment to server called client data. Server response back to the request from server side called as server data.

The data transmission, retrieval takes major role to perform process over data in agents. Transmission of data takes place once after server provides acceptance to client network connection. Data bandwidth plays role to speedup process while transmit data from client side to server side.

SP-FS Techniques

As already explained the proposed SP-FS Technique involved centralized network oriented data storage. It also technically solve error existed with Bitcoin and Blockchain technology of financial status. This design involved modules at agent side are as follows Company insertion, Agent data maintenance, Proprietor Agent, Financial Status Calculation, Report view.

The above module description are explained below

Company Insertion:-

In this module, the design page involved fields used by authorized person to include new business and its featured design to process over network. It is like new interface agent added to network. This module processed only at the time of new source of income or business signed under Sole proprietorship. It also gives the authentication information to agent for data transaction.

Only the proprietor agent has the authenticated rights to add new company with existing. At the time of creating agent it retrieves all necessary company details including registration, TIN and PAN information of ownership. It also maintains the company starting date with capital amount invested to company for taxation purpose. It does cross check new company information with existing company database information to avoid repetition entry.

Availability Algorithm Check with database table output:-

INPUT:- Company registration details
BEGIN
      Step 1: Enter Company detail as Input
      Step 2: Retrieve existing company information as dataset from database
      Step 2.1 if(retrieved recordset information match with new record)
       TRUE
       Warning Message "Company already exist"
       FALSE
Design Provide username password page to set Independent
        authentication to agent
       if(Password field should be alphanumeric exceeds 8 character)
      TRUE: Message "Create company Sucessfully"
      FALSE: Warning Message "Try again, Password should be   alphanumeric"
END

Output database looks as below after successful insertion of record.

	COMPANY ID	USER NAME	PASSWORD
1	1	Institute	Admin1@inst
2	2	Drvscl	Admin1@drvscl
3	3	Sinfotech	Admin1@sit

Table 1: Multi-Agents login data storage

Multi-Agent data maintenance:-

SP-FS technique multi-agent coordinates three agent data together to complete task. Three different agent acts like independent agent to data entry level. Records about each and individual agents company information computerized under parallel shared memory over

network. Common web application with different authentication login provided to each agent. Example: SP – Financial Strategy is the common web application commonly accessible by all agents from their browser. At first step it ask agent to enter username and password to conclude from which company the agent is from. Based on login information the web pages can be accessible.

Algorithm Company selection-

INPUT:- User name and Password
BEGIN
     Step 1: Enter Username and Password
     Step 2: Retrieve login table dataset
     Step 3..if(Username and Password match with dataset record)
         Retrieve equivalent Company id from record set.
     Step 4: Company id comparison
     if(CompanyID equals 1)
     Set boolean value True for Setvisible() to Institute Agent home page.
     Set boolean value False for Setvisible() to Driving School Agent home page & Infotech Agent home page.
     if(CompanyID equals 2)
     Set boolean value True for Setvisible() to Driving School Agent home page.
     Set boolean value False for Setvisible() to Institute Agent home page & Infotech Agent home page.
     if(CompanyID equals 3)
     Set boolean value True for Setvisible() to Infotech Agent home page.
     Set boolean value False for Setvisible() to Institute Agent home page & Driving School Agent home page.
END

After get visible of exact home page using available link the agent can do entry, updated existing, delete unwanted or repeated entry and so on. The design page of each agent is differs from one to another, because the data we work are same not same business. It is different business with different dataset.

Data fields of Institute Agent it contains information about Student personal information, course they taken to study, Student fees payment detail, overall course fees detail, Duration of course, Test attend and its mark secured, Certificate details, Student attendance detail, Day to day fees collection information and so on.

Data fields of Driving School Agent as similar like Institute agent. It contains customer detail, License or LLR application information, RTO test dates, Test result details, Vehicle details, Vehicle Insurance details, Day by day amount collection.

Data fields of Infotech include information about Tierup company details, Project in and out status, Employees performance calculation, Training class details, Visitors details, Cash in details.

All above mentioned details are independently maintained by multi-agent over parallel shared memory on network.

Proprietor Agent:-

Proprietor agent in SP-FS mechanism plays major role to overcome issues raised by existing system. The Proprietor agent follows client server model data service over network with the help of HTTP protocol. Protocol is the set of rule or instruction contains predefined segment related to data transmission from client side to server side.

Proprietor agent can provide required information as input from client side to server, which respond as per client requested information as data as response.

**Algorithm Proprietor agent:-**

INPUT:- Required financial data to retrieve expected response
BEGIN
     Step 1: Check authentication of ownership
     Step 2: If (authentication success)
         TRUE
     Allow Proprietor agent to access parallel shared memory datset.
     Step 2.1 Get required information from agent to retrieve data from server
     Step 2.2 Match data from client side to server side dataset
     Step 2.3 Create new dataset to client based on request sent from client side as respond back from server.
     Step 2.4: New Dataset from sever involved SP-FS calculation theorem to get accurate financial status about business.
     Step 2.5: Display Dataset information along with calculated data as Output.
   FALSE

Report View:-

Proprietor agent can request data from server as individual business information or overall business strategically report. Agent request need the information like from month and year as input along with company id if the request is for individual company report. For overall report only month and year are enough to retrieve data from server.
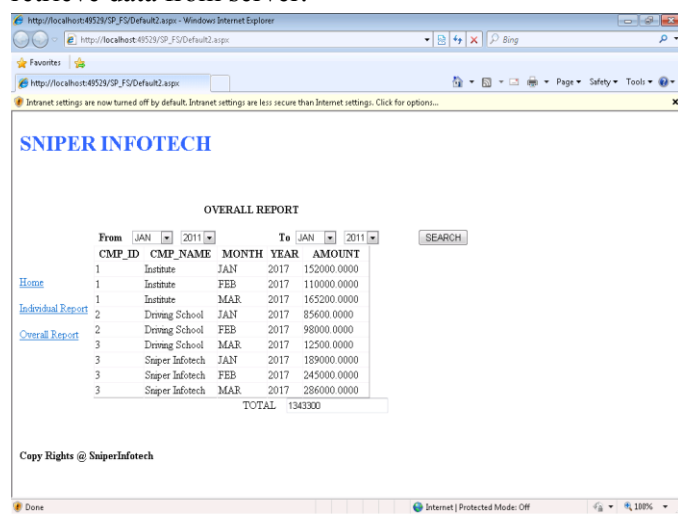
Figure 4 : Overall turnover details
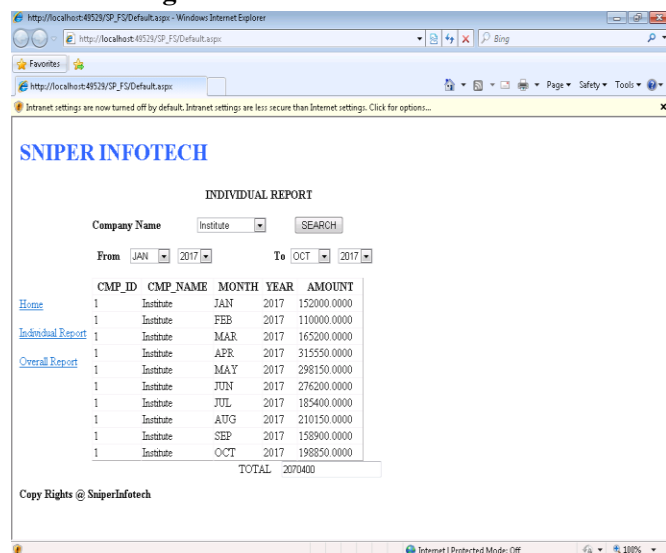
Table 2 : Institute turn over detail

Individual report retrieves data independently entered by one of the agent of multi agent process to shared database. It receives data from parallel database where company details like id, name, month and year.

Proprietor agent Individual company status:-

INPUT:- Company_Name, Starting and Ending Month and Year
BEGIN

Step 1: Access server database and connect appropriate table to retrieve data.
Step 2: If (Company_name equals to datafields company name)
TRUE
Collect its information as recordset.
Step 3: Perform repeating dataset record to separate recordset which records match between starting and ending financial year and month given as input.
Step 4.1: For begins with Starting month and year
Step 4.1.1: Set Total_amt as zero
Step 4.1.2: Recordeset month and year satisfy selected year and month
Step 4.1.3: Retrieve amount
Step 4.1.3: Calculate Total_amt = Total_amt + amount
Step 4.1.4: Set recordset to point next record
Step 4.4: Repeat Until last record
Step 5: Set condition to point next month
Step 6: Repeat recordset, Until it reach last record of month and year to stop as input.
END

The algorithm contains two looping structure for perform data processing over two dataset. First dataset retrieve all data records with satisfy condition between starting and ending month. In database records are stored in the form of day entry. To calculate total turnover amount of each year in month base, total_amount created as variable with zero as its initial value. For each record by month based it add retrieved amount with total_amount. Finally a new recordset is created with all required fields like company_id, company_name, month, year, total_amt and records.

COMPANY_ID	COMPANY_NAME	DATE	MONTH	YEAR	AMOUNT
1	Institute	5	JAN	2017	10500.00
1	Institute	6	JAN	2017	8500.00
2	Driving School	6	JAN	2017	6500.00
3	Sniper Infotech	6	JAN	2017	12800.00
2	Driving School	7	JAN	2017	6900.00
1	Institute	7	JAN	2017	8000.00

Table 3 : Day by day financial status of all three businesses – data storage

Company wise financial status calculation steps:-

Calculation step followed to create this graphical representation charts are

Here x axis month and y axis as amount in thousands,
Equation for monthwise financial calculation:-

$$\sum_{n}^{i=0} \begin{array}{c} xc \\ my \end{array}$$

Here,
i indicate as first record, initialized as 0
n represents no of records
xc represents company detail , where 1as Institute, 2 as Driving School, 3 as InfoTech
my represents month year (m - JAN,Feb,MAR,APR,..,DEC
and y -2000 to current year)

Example 1:   xc =1, m = JAN, y=2017,i=0, n=3
                Total_amount =0
                For i=0 to n
                If xc =1 && m=JAN && y=2017
                        Total amount = Total amount

+ amount
                End
                Next n

Proprietor agent Overall company status:-
Overall report retrieve data independently enter to database by one of the agent of multi agent process. It receives data from parallel database where company details like id, name, month and year.

INPUT:- Starting and Ending Month and Year
BEGIN
Step 1: Access server database and connect appropriate table to retrieve data.
Step 2: check input month and year match with recordset month year in company base
TRUE
Step 4.1.1: Begins with record 1
Step 4.1.1: Set Total_amt as zero
Step 4.1.3: Retrieve amount fileds value
Step 4.1.3: Calculate Total_amt = Total_amt + amount
Step 4.1.4: Set recordset to point next record
Step 4.4: Repeat Until last record
FALSE
Warning message "Record set not available, input valid month and year value"
Step 3: Finally sort resultant recordset as for company Id

END

Overall financial status calculation step:-

Calculation step followed to create this graphical representation charts are

Here x axis month and y axis as amount in thousands,
Equation for monthwise financial calculation:-

$$\sum_{n}^{xc=0} my$$

xc indicate as first record, initialized as 0
n represents no of companies
my represents month year (m - JAN, Feb, MAR, APR,..,DEC and y -2000 to current year)
Example 1:   xc =1, m = JAN, y=2017, n=3
                Total_amount =0
                For xc=1 to n
                If m=JAN && y=2017
                        Total amount = Total amount

+ amount
                End
                Next n

This calculation method respectively performed to get all three companies financial status.

III. RESULTS AND DISCUSSION

SP-FS Technique becomes easy, accurate and practical with the idea are shared and implemented in Sole Proprietorship companies to calculate their individual and overall company financial status with the help of shared memory through network. It also lets company status to promote it to next level. The output from the financial status model implemented automation system and overall financial status details help the proprietor to his get exact and accurate personal financial information.

1. Individual Company periodicals turnover detail

Proprietor agent web developed to calculate two different forms of calculation results. One is individual company based data retrieval and the second is about overall company calculation report. Sole Proprietor manages three different businesses under his management.
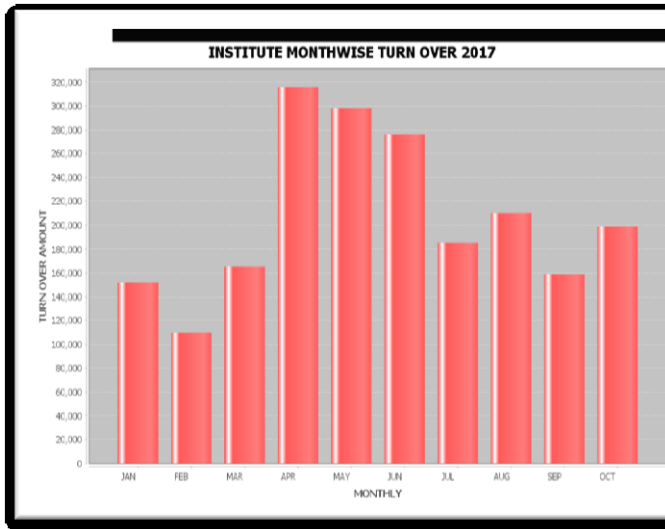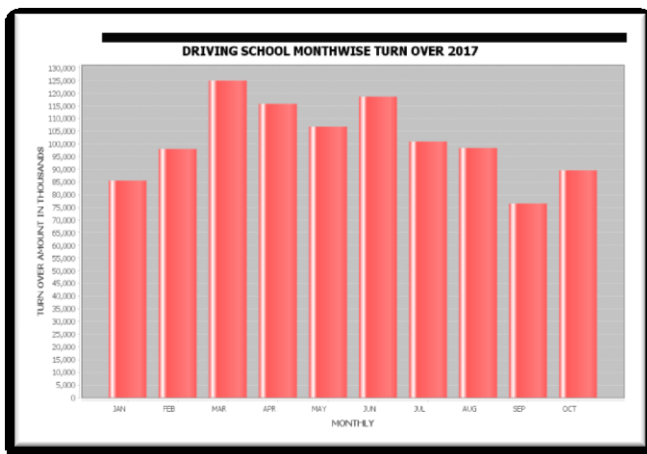
Figure 5 : Institute monthwise turn over detail

The above chart represents monthwise turnover achieved by institute, which is consider as one of the business managed under the Sole Proprietor. The X-axis plots month as (JAN, FEB, MAR, APR, MAY, JUNE, JUL, AUG, SEP, OCT, NOV, DEC). The Y-axis plot amount as its attribute, the value is between 20,000 and 320000. Interval between y axis ranges differs by 20000 each. Each month status plot as per its amount turnover reached at that month.

CMP_ID	CMP_NAME	MONTH	YEAR	AMOUNT
1	Institute	JAN	2017	152000.0000
1	Institute	FEB	2017	110000.0000
1	Institute	MAR	2017	165200.0000
1	Institute	APR	2017	315550.0000
1	Institute	MAY	2017	298150.0000
1	Institute	JUN	2017	276200.0000
1	Institute	JUL	2017	185400.0000
1	Institute	AUG	2017	210150.0000
1	Institute	SEP	2017	158900.0000
1	Institute	OCT	2017	198850.0000

**Table 5.1: Institute monthwise turn over detail**

Figure 6 : Driving School monthwise turn over detail

In database value are in day by day collection method. To convert the required detail need to perform chart the calculation method undergone with database values. In calculation company id, company name, financial month are consider to be the condition. The summation process takes place between the data retrieved based on condition. The values finally used to plot chart.

CMP_ID	CMP_NAME	MONTH	YEAR	AMOUNT
2	Driving School	JAN	2017	85600.00
2	Driving School	FEB	2017	98000.00
2	Driving School	MAR	2017	125000.00
2	Driving School	APR	2017	115000.00
2	Driving School	MAY	2017	106200.00
2	Driving School	JUN	2017	119100.00
2	Driving School	JUL	2017	101100.00
2	Driving School	AUG	2017	98600.00
2	Driving School	SEP	2017	77300.00
2	Driving School	OCT	2017	89900.00

Table 4: Driving School monthwise turn over detail
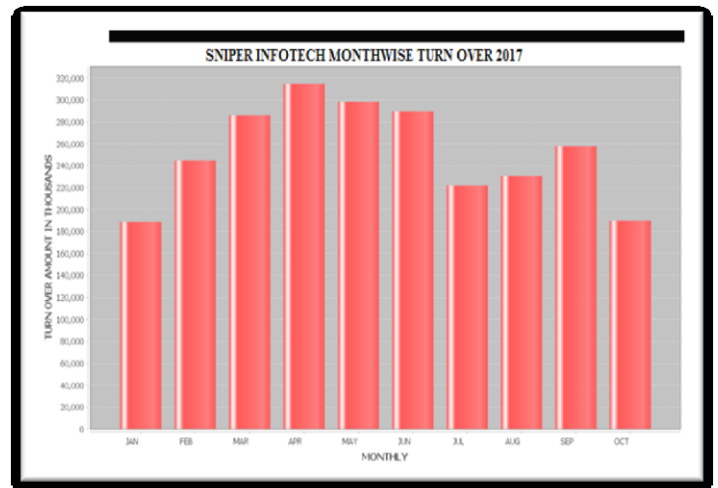
Figure 7 : Sniper Infotech monthwise turn over detail

CMP_ID	CMP_NAME	MONTH	YEAR	AMOUNT
3	Sniper Infotech	JAN	2017	189000.00
3	Sniper Infotech	FEB	2017	245000.00
3	Sniper Infotech	MAR	2017	286000.00
3	Sniper Infotech	APR	2017	317000.00
3	Sniper Infotech	MAY	2017	298000.00
3	Sniper Infotech	JUN	2017	289000.00
3	Sniper Infotech	JUL	2017	221000.00
3	Sniper Infotech	AUG	2017	232000.00
3	Sniper Infotech	SEP	2017	259000.00
3	Sniper Infotech	OCT	2017	192000.00

Table 5. Sniper Infotech monthwise turn over detail

2. Overall Company periodicals turnover detail

The below chart contains plot result retrieved to calculate all three companies overall financial status in monthwise. It represents the growth of Proprietor overall financial status monthwise. Through this the proprietor can easily identifies the up and down of his financial states on month bases.
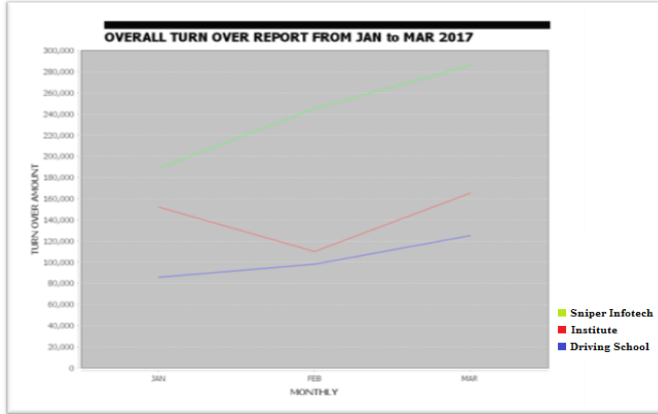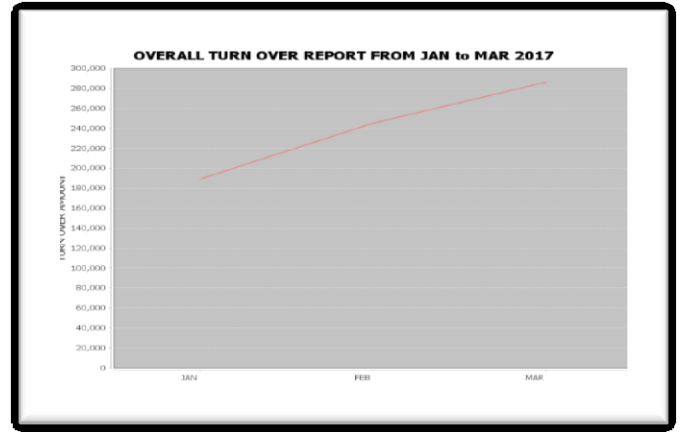

Figure 8: Monthwise Overall turn over detail from Jan to Mar 2017

It helps proprietor to think off new ethics to grow up financially week month to strengthen his business income. Through this graphical representation we can easily identify which company and month need more marketing attention to strengthen business output.

CMP_ID	CMP_NAME	MONTH	YEAR	AMOUNT
1	Institute	JAN	2017	152000.00
1	Institute	FEB	2017	110000.00
1	Institute	MAR	2017	165200.00
2	Driving School	JAN	2017	85600.00
2	Driving School	FEB	2017	98000.00
2	Driving School	MAR	2017	125000.00
3	Sniper Infotech	JAN	2017	189000.00
3	Sniper Infotech	FEB	2017	245000.00
3	Sniper Infotech	MAR	2017	286000.00

Table 6: Monthwise Overall turnover detail from Jan to Mar 2017

Figure 9.: Proprietor Monthwise Turnover detail

In below graphical representation, X-axis plots month as per user selection and Y-axis plots financial turn over amount of all companies in month based. The calculation of summation takes place to get plot value achieved based on condition as month and year values selected for data retrieval from data storage.

month	c1	c2	c3
JAN	152000.00	85600.00	189000.00
FEB	110000.00	98000.00	245000.00
MAR	165200.00	125000.00	286000.00

Table 7. Proprietor Monthwise Turnover detail

IV. CONCLUSION AND FUTURE WORK

CONCLUSION

The conclusion identifies new technology called SP-FS technique. The existing systems drawback of implementing Distributed memory sharing mechanism over network to maintain financial status of business-to-business bitcoin and blockchain algorithm overcome with suitable new technology named SP-FS technique for sole proprietorship. Parallel computing method of multi-agent individual data transaction use Web server as its backend. Web Server acts as common memory storage for both agent and multi-agent involved in SP-FS technique. .net framework web application created to with proposed technology to improve accurate financial status of different business at anywhere.

FUTURE WORK

The SP-FS technique, implemented with agent and multi-agent memory sharing, network connective system of Sole proprietorships satisfied with memory

and security measures as what required for framework tool. SP-FS technique we have only concentrate major on time consuming and centralized memory remaining features of financial calculation, another features yet to be concentrate while implement to any agent collaborative system with huge memory need centralized memory sharing. If this system is future implemented with the asset and expense calculation along with current financial status calculation gives more clear data accuracy. Only financial status, entry details, business growth implemented in SP-FS technique. It is good to updated company full financial status makes this technique more better accuracy.

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