

METHODS AND SYSTEMS FOR USE IN MONITORING THE OPERATIONS OF A BUSINESS

Technical Field

5 The present invention relates to methods and systems for use in monitoring the operations of a business.

Background to the Invention

10 It is known to calculate various performance indicators which can provide operators of a business with feedback and information regarding the performance of a business. Such indicators typically include established financial and non-financial type measures such as debtor days, turnover and debtor and creditor information as well as inventory and customer information. When measured and reviewed over time, these performance indicators can give business operators an idea of whether the operation of
15 their business is changing for the better or for the worse. However, such indicators do not allow business operators to understand how their business compares to other businesses.

 A need remains for improved methods and systems for monitoring the operations of businesses.

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Summary of the Invention

 Aspects of the invention are defined in the independent claims. Some optional features of the invention are defined in the dependent claims.

25 In a first example, there is provided a method of monitoring the operation of a business including the steps of: receiving operational data from a number of businesses, the operational data being derived from the businesses use of software programs; calculating at least one individual performance indicator based on the operational data for the business; calculating at least one group performance indicator based on the operational data for a number of businesses; and comparing the individual performance
30 indicator with the group performance indicator.

 The software programs may be hosted online.

 The step of comparing may include displaying the individual performance indicator along with the group performance indicator.

The individual performance indicator may be displayed along with the group performance indicator in an onscreen widget.

In a second example, there is provided a system for monitoring the operation of a business including: receiving means for receiving operational data from a number of businesses, the operational data being derived from the businesses use of software programs; calculating means for calculating at least one individual performance indicator based on the operational data for the business and for calculating at least one group performance indicator based on the operational data for a number of businesses; and comparing means for comparing the individual performance indicator with the group performance indicator.

Brief Description of the Drawings

An embodiment of the present invention will now be described, by way of example only, with reference to the accompanying drawings, in which:

Figure 1 is a schematic view of a system according to an embodiment of the invention;

Figures 2 and 3 are schematic views illustrating the interworking of various modules of the system of figure 10;

Figure 4 shows a user interface dashboard presented by the system of figure 1; and

Figure 5 shows one of the widgets of the dashboard of figure 4.

Detailed Description of the Preferred Embodiment

Referring to figure 1, a system 10 is shown for making online software from vendors 30, 32, 34, 36 available to businesses 40, 42, 44. The system 10 is embodied in an internet connected server computer 12 running suitably configured software under control of an operating system by way of a typical processor and memory architecture 14. Server 12 is connected to database 16 used for storing and retrieving information used in operating the system. Server 12 communicates via the internet 20 by way of router 18 to receive and transmit information used in the system as will be later described. The entire system other than online software from vendors as described is hosted in the cloud, in a secure, high availability, mirrored hosting environment, providing compliance to geographical data sovereignty regulations. Server 12, which in

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practice may be a collection of more than one physical or virtual servers, communicates information between its databases its applications and Online Software Vendors

databases via an API.

System 10 is designed to help SME businesses 40, 42, 44 run their businesses better. System 10 makes available online software “apps” categorised into disciplines (e.g. accounting, inventory, sales people etc.). Each business 40, 42, 44 chooses
5 particular apps from each category that best suits their business. As the business use the apps to run their business they are presented with an automated dashboard which provides key metrics in real-time to the appropriate personnel in the business for management and operations as will now be described.

Referring to figure 2, the operations of business 40 as are illustrated. Business
10 40 has previously selected various online software apps 60 such as marketing application, CRM application etc. These are used day to day for entering data by business personnel 50 including marketing assistants, sales persons etc.

A standardised API 62 extracts data from apps 60 which is processed by various rules engines 64 to standardise and normalise the data from various app sources.
15 This ensures that data is correctly aligned for use in various widgets and dashboards.

Two rules engine Applications are used to process data.

1. Normalising Rules engine Application,
2. Standardising Rules engine Application

These are designed to format data into the correct status for storage in database 16,
20 which is the source of data for the widgets. This method enables processing of large scale volumes of data in real time on the fly.

The Normalising Rules Engines “normalises” each data set in relationship to each vendor source via algorithms ensuring the calculations are like for like. This is performed by obtaining the vendor's data set via an API, performing some calculations
25 and then uniquely labelling it.

For example, income maybe defined by one vendor as AccountID=4 and 5 and defined as AccountType=Revenue in another. This is then normalised to one single value named "sales" within a data set stored in database 16.

The Standising Rules Engine then take the stored data sets and standardises data
30 to ensure data sets are comparative between like businesses eg in common industry sectors, or in revenue bands eg: a business turning over \$2 mill has a relationship to a business turning over \$1 mill.

The standardisation process involves calculating a baseline average value within an industry and/or segmented via revenue bands, from the normalized data set. This allows an individual to compare their performance to that of their peers.

The normalised and standardised data 68 is stored in a common information store 66 and is used to calculate individual business performance indicators in real-time. Widgets 72 present the performance indicators for decision support and management monitoring. Widgets 72 are arranged in management dashboards 70 which group together widgets of primary interest to managers 52 having particular roles in the business.

When data is extracted from a number of businesses 40, 42, 44, this can be utilised to calculate group performance indicators as will be further described with reference to figure 3.

Referring to figure 3, when many businesses, 40, 42, 44 are using system 10 then it becomes possible to calculate group performance indicators based on the data obtained for a number of businesses. The businesses 40, 42, 44 are categorised according to their sector 80 and further by peer groups 82 which can be based on a range of factors including size, geographic function or the role of a business within their sector. The common information store 68 collates data from businesses 40, 42, 44 by sector and peer. This data is processed to calculate group performance indicators 74 for benchmarking, best-practice and gap analysis reporting. This enables data from a business in a sector and their peers to be standardised and compared to their own individual business metric.

Outsourced data 76 may additionally be used to calculate either individual or group performance indicators.

Referring to figure 4, an example of a dashboard 70 is shown including six widgets including cash position and solvency widget 72a, debtor & creditor balance widget 72b, customer engagement widget 72c, business growth widget 72d, bookings and staff widget 72e and gross profit widget 72f.

Referring to figure 5, widget 72a is shown in isolation. It includes graph lines showing the cash position in terms of “coverage”. This is calculated by dividing the debtor balance by the creditor balance shown in widget 72b of figure 4. Line 94 depicts the individual performance indicator of the business that is viewing the widget. The other lines are group performance indicators and include a benchmark indicator line 92

and a best practice indicator line 90. A gap analysis is the difference between lines 94 and 90.

The widgets allow the data stored in the common information store 74 to be sliced and diced and optionally combined, overlaid or enhanced with outsourced data 76 in a practically unlimited number of combinations.

Similarly, the group performance indicators can be calculated based on classes of business grouped by various factors or combinations of factors such as industry sector, geographic location, size etc.

It is preferred that the widgets are not configurable by users to improve the ease of use of the software for the end user.

One example of use of outsourced data is weather data. It has been found that the performance of a certain types of businesses varies with the weather. For instance, shops located inside shopping malls tend to perform better when it is raining. Shops located outside tend to perform better when the weather is fine. The projected performance of a business can be estimated taking into account weather forecast data.

It can be seen that the current techniques have at least one of the following advantages:

- Business managers can monitor and compare the performance of their business in relation to other businesses.
- The classes of other businesses against which the performance of an individual business is compared can be changed to provide various business insights

Any reference to prior art contained herein is not to be taken as an admission that the information is common general knowledge, unless otherwise indicated.

Finally, it is to be appreciated that various alterations or additions may be made to the parts previously described without departing from the spirit or ambit of the present invention.

CLAIMS:

1. A method of monitoring the operation of a business including the steps of:
making available a number of software programs to a number of businesses,
enabling the businesses to select software programs for day to day use;
receiving operational data from a number of businesses, the operational data
being derived from the day to day use by the businesses of their selected
software programs;
calculating at least one individual performance indicator based on the
operational data for the business;
calculating at least one group performance indicator based on the operational
data for a number of businesses; and
comparing the individual performance indicator with the group performance
indicator.
2. A method according to claim 1 wherein the software programs are hosted
online.
3. A method according to either of claim 1 or claim 2 wherein the step of
comparing includes displaying the individual performance indicator along with
the group performance indicator.
4. A method according to claim 3 wherein the individual performance indicator is
displayed along with the group performance indicator in an onscreen widget.
5. A system for monitoring the operation of a business including:
means for making available a number of software programs to a number of
businesses,
enabling the businesses to select software programs for day to day use;
receiving means for receiving operational data from a number of businesses,
the operational data being derived from the day to day use by the businesses of
their selected software programs;
calculating means for calculating at least one individual performance indicator
based on the operational data for the business and for calculating at least one
group performance indicator based on the operational data for a number of
businesses; and
comparing means for comparing the individual performance indicator with the
group performance indicator.