

SOFTWARE GRAPHICAL INTERFACE

Background of the Invention

The invention relates to software and more particularly to software that addresses the needs of project managers and other professionals.

Object and Summary of the Invention

It is an object of the invention to provide methods and software for displaying the information flow and information storage associated with a project, company or organisation. The aforementioned flows and storage are preferably represented symbolically on a single screen by a number of objects. Objects which appear on the screen may serve as links to screens which depict the object in greater detail. Objects are depicted in relation to a time line.

Best Mode and Other Embodiments of the Invention

The invention pertains to a business process and a way of displaying data and more particularly to methods and software for displaying electronically the structure and content of a filing system including filing system data that relates to an organization or a company or a project that utilises electronic data files. The software displays symbols, which represent information flow and knowledge in an organisation, by displaying different shapes and colours composed documents are filed into differing taxonomies within the organisation matrix. This invention is a composer, communicator, interrogator, searcher, interpreter and most of all a filer of electronic documents and information data. The software application acts as a master to a user working in a project, which is the opposite of all other software, which acts as a slave to a user working in a project.

The invention will be illustrated by a non-limiting example which is described below, in connection with the accompanying drawings.

In the drawings, Figures 1 to 13 are various illustrations of a preferred embodiment of the invention, Figures 14 to 20 explain various features of the embodiment, Figure 21 together with Figures 22 to 25 relate aspects of the embodiment with various user situations, Figures 26 to 30 provide a legend for the labels used in the preceeding figures and Figures 31 to 34 provide a useful glossary of terms.

Detailed Description of the Drawings

As shown in Figure 1 an entire project company or organisation may be displayed on one screen. It is possible to produce multiple organizations also on one screen.

The display is symbolic of a computer network as well as the organisation the
5 matrix represents.

The matrix is composed of storage repositories 1,3,14, which are displayed as shapes, which are separated from one another and interconnected by lines 5, 5q, 5l, 5s which represent communications.

The shapes shrink and grow according to data weight. Weight is defined as a
10 product of data volume, data type, documents and document types filed in the system. The shapes change colour according to time after an action has taken place. These shapes are interactive when the cursor is held over the shape. The shapes appear to explode on the screen when the cursor is held over the shape for an extended period of time, the exploded shapes are noted on figure 5, 6, 7 and 8.
15 When the shape explodes you can see what is inside the shape. An illustration of an exploded shape is shown in figure 5,6,7 and 8. If you do not explode the object to the screen you can zoom in to the shape to see all the data links and files inside the object shape in the display. The shape is associated with cascading menus as shown in Figure 13 which propose questions and the user selects the answers so, the
20 computer can make calculations, which change the shapes, visual attributes and arrangement.

The entire project company or organization has a total weight, which is expressed as 100% of the total weight of all repositories.

The matrix can be built in 2 or 3 dimensions depending on the complexity of
25 external forces on the organisation. The external forces on the project are put in to another screen before the organisation starts as shown in figure 2 and the inputs draw a representation of the project or organisation which is shown in figure 3. Figure 3 represents the external forces, volume of knowledge and risks in an organisation and is represented in the display by a box, which is shown in figure 3.
30 The inputs, which are linked to external data, move the shapes of the whole model built inside the box illustrated in figure 3. The Z and Y-axis are divided up by weight of taxonomies in the organisation, which are inputted and linked from external sources of information and their database, which describes the external environment acting on the organisation.

The input screen, which is described in figure 2 is part of the pre-organisational set-up of the organisational model in figure 3. In that set-up the total weight of z and y-axis are not necessarily 100 as the weight is determined by external forces, historical data, human resources experience and is linked to external databases
5 which intern automatically adjust the model in real-time. These links maybe interest rates from a central bank, share market prices or even the temperature of the day are but a few examples of the type of links that are used in the model, matrix or display.

In the example of project management organisation the pre organisational set up
10 figure 2 creates the external parameters, stimulus 1, time axle 6 and product14 that is shown in figure 3. This creates the volume of the project organisation ready for the project to be further resourced as illustrated in figure 1,10,11 and 12.

At the top of the figure 1 at the centre of the symbolic matrix display or model and flagged as item 22 is the time it takes to "reach the point of no return". Point of no
15 return refers to the point where resources run out and the project cannot reach the next milestone in which case the project crashes or the project has to cease and go back to the last milestone.

The shapes in figure 1 and numbered 3 are representative of people's roles as well as their area of responsibility and their connection to other areas of responsibility
20 and storage of documents.

If you ignite, activate or open an attribute of the model, the associated menu or dialogue box will ask you to compose a document, file a document, communicate a document, search or interpret a document by using a typical cascading menu is shown in figure 13. Further menu items or selections will ignite with out mouse
25 click, a selection is merely required by hovering over an object with the cursor. Should an event occur externally or internally the model automates itself to correct the action. The automation of correction works when a trend is found to be leading to a problem. For example the trend of a product on a shelf is 10 units per day and historical data says it has been like that for 20 years. The trend changes to 20 units
30 per day this makes the software squawk and an action is manually inputted to increase the order of units per day or code is developed in the software to automatically order more units per day according to the revised trend of units used per day.

The matrix also has a central axis 6 called a time axle. The time axle appears
35 hollow and has several sub components. An example of the sub components in the

display are communication, scope and procurement documents that are in the time axle and which are illustrated by different colour lines 16,17,18 in figure 1 and are parallel to the time axle 6. These lines when ignited will become barometers that forecast progress using algorithms which create a trends "over the baseline" budget which indicates progress success. The time axes 6 sub components contain a time ordered sequence of all the documents archived in the matrix and form as the central repository for all documents. The other components in the central repositories are communication, procurement and scope however are not limited to just those sub components.

- 10 The start repository of the time axle 6, which is shown in figure 1, is called the stimulus repository that is located to the left of the screen. This stimulus and start of the organization or project has sub components, which are shown on figure 5. Figure 5 has 5 main Components and they are 4 sub component storage repositories denoted as figure 5.2 and a central functions area repository denoted as figure 5.1.
- 15 An exploded view of figure 5.2 can be seen in further detail in figure 6. Each storage repository figure 5.2 has a central functions area that relates to the particular stimulus in the centre of the sub component figure 5.2, which is numbered, 1. The 4 main components that are further illustrated on figure 6 are typical and not limited to the amount of storage denoted by 42. The four main sub components depending on type are linked from a database and may be for example,
- 20 Human resources, Material, Plant Equipment, major stakeholders or Owner with a stimulus in the middle 1 of the 4 components creating the scope for the sub components in that repository. The stimulus 1 in the middle of the sub component is surrounded by four segments 47,48,49,50 which is the function area of the
- 25 repository and is used to access information, list reasons with regard to the stimulus with a history, create processes within the repository and provide tasks to be carried out. The Quadrant or segments is not limited to four sectors and may be part of an 8-segment area that surrounds the stimulus and can be flagged from the database accordingly. This area whether being 4 segments or 8 is the work area for
- 30 human resources in the repository and is surrounded by 9 the limits circle which symbolically divides off the storage area where the arrows and intersections 11 filter data inputs and outputs 10.

The stimulus acts as a repository that gathers and transfers data and has a baseline of zero, it is electronically moved around the matrix via different human resources and is sent through out all the management repositories which are labelled 3, the stimulus gathers data and data weight from other repositories to which the stimulus repository weight grows into what becomes 14 the Product repository. It can be

seen as the stimulus repository is an idea and has zero data, which then grows into a product repository, which holds all the data of the product hence known as the baseline or budget.

The management repository 3 and product repositories 14 have the same sub components as the stimulus repository 1. The management repository 3 is a portion of the total amount of data in the product repository 14 hence the total data weight in the project is in the product repository. The display should be thought of as working akin to a stimulus being the messenger which carries the idea while the management repositories process the idea and store the data, and the combination of many management repositories and the transfer of information via the stimulus creates a product 14. The product repositories 14 has all the value of data weight from the management repositories 3.

As the product repository 14 is the sum of all the management repositories 3 each management repository 3 calculates its value by taking the value at 34 and dividing the weight of each repository within itself to establish a value of the repository, which can be shown on each repository. Should a project be scaled up the value in the repository changes to represent the correct value of the project according to the new value in 34.

The repositories 3 move on screen when the interpreter 29 is switch on. The movement involves the repositories moving in to different quadrants as related to a score, which may be for example project performance risk quality etc and is not limited as to the criterion figure 4 illustrates 4 quadrants of different values ++, +, +- and --. Each spoke of communication has a scoring applet 13 on figure 4 creating a visual score on the communications spoke in that repository.

The communication spokes 5 in figure 4, which have the greatest length, also provide an indication to the user of the display that it is the repositories that have the most difficult communication and are the risky repositories whilst the communication spokes that are the shortest are the least risky and have easy communication.

Inside the human resources hub 2 is a communication spoke 5s in figure 7 which is a connection from the human resources hub 2 shown in figure 7 to the rim or loop of communication 51 where further human resources hubs 2 are joined to the central human resource via communications spokes in figure 7. There is also a time axle 6 from the hub 2 to the repository 3 and a symbolic line of mental focus 54 from the rim of human resources 2 to the repository 3 in figure 7. The

communications spoke 5s provides all of the communication applications for communicating and is the main artery of data to other human resources hubs shown as 2. As documents and data is filed in the communications loop 5l, the data filed archives and moves along the communications spokes 5s, where it meets the
5 central time axle repository 6 and the central communications axle 16 as shown in Figure 1,7 and this is where all data is stored. The central time axle 6 repository cannot be opened only viewed and printed.

As shown in the project organisation environment figure 2:

10 Depicted in figure 2 is the organisational environment, which is identified by an experienced project director from the organizations or projects cost centres, experience, and knowledge in similar projects and from historical data.

The input in to the repositories z1-4 and y1-4 in figure 2 develops the parameters for the graph shown in figure 3. Figure 3 is the basis of the display to build further details parameters between the stimulus 1, time axle 6 and product repository 14.

15 Depending on the type of project the y and z components may change from organisation to organisation, location to location. However the x component is always time and that never changes and is the whole basis of the screen matrix as shown in Figure 1.

20 The Y and Z axis of the graph shown in figure 3 is built with different parameters depending on project type and what the project director wants to know during the project as the knowledge of the project is visualised in the screen or model. These parameters can be changed or reset during the project as matters are mitigated from the project. An example of the matters that y and z represent may be geographical location risk and z may be human resources risk. As a matter or risk have been
25 overcome the risk is removed as time passes and is spread into other up coming risk parameters further down the time axle. Each repository is thus assigned various elements of risk and each percentage of risk allows for continuous interrogation of all repositories shown in figure 1. When the interpreter 29 in figure 1 is switched on all the repositories with excessive risk, visually squawk and
30 provide an indication of the repositories at risk with regard to the parameters inputted in figure 2. The sensitivity of the risk representation may be adjusted. After the display has provided a risk indication the software automation is exercised to re-resource the area of concern automatically or manually. Historical trends of data are held in computer memory which are aligned against current
35 trends, when the trends that are graph cross an action occurs of the display

squawking or it is a signal to automation a further action in the computer hence automating the organisation. Where the two trends meet on a graph is when the risk indicator clicks in or automation of ordering further resources starts to take place in the display.

- 5 The xyz components figure 2 of the project environment represents the xyz dimensions of conceptual 3-dimensional shape, which represents the external parameters acting on the projects model display. As each axis changes, so do the dimensions of the graph of figure 3 thus shrinking and growing the organisational structure.
- 10 Once the parameters weights, which are inputted and shown by figure 2, are inputted from the database a space is created in the 3 dimensional screen as shown in figure 3. The volume of the space is symbolic of the project resources for example but not limited to knowledge available to the project the axis are symbolic of risks in the project. There is a stimulus represented by 1, a time axle represented
- 15 by 6 and a product represented by 14. It is from this box or graph, which is representative of project knowledge and the external risk forces on a project at a given time.

When the box or graph of figure 3 is completed the building of the internal environment between the stimuli 1 and product 14 of the project begin.

- 20 External parameters have been set and the internal project is now ready to be built as shown in Figure 1.

One important feature of the program is identifying risk in projects and forecasting trends that essentially tell us if we are going to run into a problem in the organisation.

- 25 As shown in figure 1 the stimulus repository 1 that is located on the left-hand side of the drawing halfway up the page is numbered 1. It is the first repository in the matrix in figure 1. The stimulus 1 is connected to a time axle 6 which runs from the left hand side of the page to the right hand side of the page, the time axle 6 is connected to the product repository 14 on the right hand side of the page and is
- 30 denoted as a small triangle. Within the stimulus repository there are five sub-components, 4 typical work areas as depicted in figure 5.2 and for example represent management & labour, material, plant & equipment and the owner users component of the organisation, at the centre of the typical repository is the functions area of the repository shown as figure 5.1. As shown in figure 5.1 in the

centre of the repository is a stimuli (Inbox) and functions area (Processes) of the repository. Within the repository at the centre are segments 4 which are in the functions area of the repository and are depicted by 47 eg knowledge, 48 eg reason, 50 process and 49 tasks. The sub-components are linked together with arrows 43, 5 which cross a limits circle 11 that enables the user to calibrate and filter the quality and risk of data, which enables the model to calculate criteria so the model can shrink, grow, change colour and texture. All the repositories are labelled from a database and the database can only have one type of label with many types of attributes per stimulus, which is stored with each flag. Each repository stores data 10 processes, laws, standards, guidelines and general information in different ways so that it can be used in other parts of the organisation as a standard method in the organisation. The stimulus repository passes through all management repositories 3, each repository marked 3 has the same criteria throughout the organisation. The stimulus repository in figure 5 moves around the display by electronic transfer 15 which allows different roles and responsibilities to be added to the repository until all the tasks and there criteria has been entered into the repository to make a product specification in the product repository 14 thus making the data grow in the project as the ball or repository is emailed around the project structure or display. Information or data from each management repository 3 is collected and stored in 20 the stimulus repository until the stimulus reaches the end of the project time axle 6 where it is then considered the product repository. This creates a weight for the product repository 14 of 100 and the stimulus 1 of Zero. Each management repository has a data weight which is part of 100 and greater than zero hence all the management repositories 3 add up to a weight of 100 which is equal to the product 25 repository 14. Human resources hubs 2 have no weight as they only store personal matters. All the criteria from the project that has been gathered from all the management repositories 3 create the budgeted baseline of the product specification. As shown in Figure 5 the basic sub components in the project are material 44, plant equipment 45, Labour Management 3, the owner's specification 30 46, the stimulus 1 and the function area figure 5.1. The figure 5 is a typical repository and represents these sub components and is typical through out a project in every repository.

As shown in figure 1 the human resource hubs are located along the time axle 6 of the organisation, which is labelled 2 in figure 1. The human resources hubs 2 35 which are placed along the time axle, are flagged from the database according to the correct role or responsibility in the management resource. Figure 7 illustrates what is inside the human resources hub 2. At the top of the figure is a management

repository 3 that has all the management responsibilities of a repository as described by figure 5. Figure 7 at the base which is numbered 2 of the hub and spoke is the centre of the project team, which is connected to the outer rim or loop 51 of human resources by a communication spoke 5s. A sub time axle 6 connects
 5 the management repository 3 to a central human resource 2 via a communication spoke 5s. While this is where the human resources roles and responsibilities are stored in the database it is not where the human resources work. When the project is in motion different styles of human resources attend to different roles and responsibilities in the said management repositories 3. On the screen the human
 10 resource moves his hub 2 into a management repository 3 and logs on to the management repository 3. By doing this he ignites the repository 3 and he then logs on to the chosen roles in figure 5 no 47,48,49,50 that he is then required to carry out the particular task in the project. At the end of the task he files, communicates or logs out of the sub component in management and retreats to the human
 15 resource hub where he awaits his next job, which comes in the form of a link to a management repository with a stimulus requesting what to do. When a human resource logs in to a management resource there is always an elastic line from where he came from in the project that is visually shown in the display. This has two effects that many different human resources have many different roles. Which
 20 enable the right people to do the right job. The lines that link from the outer human resource team and flagged 54 are symbolic of mental focus on a task by a team in a management repository which is used to store data from team focus groups and brainstorming activities in a project.

As shown in figure 1-management repositories 3 are a typical repository figure 5
 25 and have sub-components, which are shown in figure 6 the sub components have a functions area and it is labelled figure 6.1 on figure 6. The management repositories 3 are placed throughout the matrix where they connect via communication 5,51,5s, 5q to the human resources hub 2 on the time axle 6 of figure 1. The management repository 3 has generic sub components, which include
 30 a stimulus 1 with additional components called segments, which are shown in figure 6 and flagged 47,48,49 and 50. These segments surround the stimulus 1 and are associated with that stimulus. Typical associations in the segment figure 6 and figure 6.1 may be for example Knowledge 47, Reason 48, Processes 49 and Tasks 50, which are filed with the different stimuli 1 that arrive in the sub component and
 35 are stored and accessed by different applications. Each management repository 3 has a central stimulus 1, which is lodged in, run and accessed from the hub of human resources 2 so as to be able to open and view missions, specifications and

plans to carry out the project. As the project progresses, different repositories or sub components of the project are formed and the storage of these components is done by the chosen sub components where documents may be transferred from one repository to another as shown in figure 5. For example a document from a storage repository may be transferred 48 to the central stimulus 3. In doing so the document passes through a filter 9 which is calibrated to filter document type and content. This is the area of the display where documents are filtered and assessed so the display visualises the knowledge.

- a. A process in a repository 1,3,14 are symbolised by 15 in figure 5 where a curved arrow is depicted, the curved arrow is depicted by figure 8 with process repositories 53. A process is a number of chronological events where the process repositories 53 can be flagged or labelled for example "plan do check act" hence dividing a task down in to smaller components. Thus a checklist of issues in a project or organisation is entered in to these repositories, which are between sub components of a management repository 3.
- b. Where the Curved arrow crosses a loop such as the in figure 8 and labelled with repositories 52, these are known as sub processes with in the management repository 3 between sub components.
- c. Where the Loop with repositories such as 53 are circled around a sub process it is a further and lower level process which further refines a process of a task.

Within the management repository 3 there are links to different web pages and applications customising the knowledge processes reason and tasks in the repositories functions area. The sub components 42 on figure 6 are storage areas for data links to the main repositories. It is the flags or labels, with in the Sub components that create the key word search for data in the project network or web. Each stimuli that arrives in the management repository has different parameters which are linked to different processes and each process has different reasons and different reasons create different tasks and different tasks require different applications to execute the task at hand. The display is a filer that stores stimuli with all the different attributes, which standardise management of tasks.

As shown in figure 1 and 4, a document 4 is described in the model by a coloured line that appears between for example the second and third loop at the bottom of figure 1. The document is visually shown on the screen by the line 4 and has many

attributes such as colour, thickness, and texture. When the cursor is placed over the document 4 it ignites the document attributes describing the origin, body of content, document type etc, If the cursor is held over the line for long enough the document will explode in full vision on the screen. Once the document is read it is closed and the destination or recipient may click on the end of the document 4 to compose a further response to the originator of the correspondence. This has the action of attaching a trail for tracking documents and interrogating the database to find disputes. The program does this by attaching a barcode to an issue which intern is transferred to every document with in the same issue that has been raised and filed. As the issue is not closed off or is changed the matter escalates into a dispute. Each document has a barcode and when the issue escalates and you wish to find other documents related to the issue you can scan the barcode number into the program and the program will raise all documents with the issue concerned visually on the screen and in a list noting origin and destination of the documents. As the document ages and there has been no action on the document the colour of the line changes as chosen by the user and increases in thickness denoting a need to be opened and a response given to the origin of the document. Each document is automatically filed in the central repository 6 and a link or short cut is superimposed on the display area corresponding to a origin and destination repository. The central repository documents can only be viewed and not altered by people on the project. The central repository forms the chronological filing system for the whole organisation as it is displayed and accessed by igniting the time axle 6. As the document link ages in the repository the link automatically makes its way out of the repository gravitating towards the central repository where it travels with time down the communication spokes into the time axle where after the recommended archive storage period the link is permanently filed in the central repository along with the central files. Each document has attributes that are denoted by a barcode on the document and should the organisation wish to use the document from past projects it can easily scan the barcode and reignite the document to locate the management repository. Each document may serve as a stimulus. As each document passes through the filter or limits 9 a score for acceptability of the document are filtered and a tally conducted on inputs and outputs to create quality and risk assessments of the project document exchanges, which will assist in identifying trends that lead to disputation and scoring project performance.

As shown in figure 1 Communication lines 5 are split up into several areas of the project and are represented by a communication axle 16, communications spoke 5,

communications loop 5l, and communication quadrants 5q in the project.

Communication loops connect management repositories 3 to other management repositories 3 and are displayed in figure 1 as 5l. When a human resource 2 goes to work in a management repository 3 it is possible for the human resource once

5 logged on to the management repository 3 to click on the communications loop 5l which will ignite a choice of processes of communication and send a communication that you compose to all the other management repositories in that loop. Further to the communication loop is the communication spoke 5 which is denoted in the display in figure 1 as 5. The communications spoke 5 if ignited

10 enables a communication to be composed between a human resources hub 2 and a management repository 3. It is possible to interrogate data about communications in the display by igniting the object of communication, which will then display origin or destination, and location of a communication. The communication axle 16 carries communication from one human resource hub 2 to another human resource

15 hub 2 and is noted in the display as 16, it runs from stimulus 1 to product 14. Communication quadrants 5q access the communication of all the people in the quadrant and can communicate in one click to the management repositories in that quadrant shown in figure 1 and labelled as 5q. It is possible to colour code each type of communication and its attributes in the model for ease of distinction

20 between different types of communication in the display. The lines in the display that start with the number 5 represent lines of communication and inside those lines is a file of all the communications that have taken place from the origins and destinations of the line 5. One can insert for instances a contract applet 8 in figure 1 into the communications axle to provide a contract between two human resources

25 hubs 2 outlining a method of communication which in this instance is via the applets 8 contract conditions that maybe linked to a portal which for example has standard forms of documents to communication. If one were to cut a section through the communications 5 in the display it has sub components noting what type of communication processes are available between any two management

30 repositories 3 and the tools to be used to communicate. For Example the tools may be fax email phone whilst the documents may be letters drawings telephone calls etc.

As shown in figure 1 time is represented by a central time axle 6, the time axle 6 runs from stimuli 1 to product 14 and has many components which are time related

35 to the organisational display such as date, time, location, author, origin, destination, composing time, version etc. Importantly this is the central storage repository of all documents, which are filed in chronological order with in the project, and is

symbolic of the central repository. This repository is the repository which is backed up and it is where the links in all the management repositories 3 shortcuts to find documents. As the software is a filer, which writes the file name there, is no need for different folders to store data. The software stores all files in one folder with
5 long descriptive file names that are determined by the project director when he labels the management repositories 3. The data is filed and filtered at different point in the software display known as intersections 11 and this is where the weight and type of data is stored 11. Each document and data is valued and trended against time in the project, which enables the project to establish different criteria to
10 manage and automate management in an organisation. All documents are stored in the central repository and filed by chronological order and other unlimited attributes that assist in weighting data and documents. It is the total data weight of the central repository associated with the stimulus that gives the project a value.

As shown in figure 1, the scales up to the top right hand side of the page denote
15 risk and quality interrogation 7. This tool interrogates data and document scores that are entered at the intersections 11. The interrogation of the data and the type of data produces reports on all quality issues and risk issues in the software program. This data and information makes the display shrink and grow. An example of a report that is produced is a dispute between two management repositories 3. Other
20 items that may be interrogated are non-conformance with in the organisation. A manager each day can squelch 29 the display and the display will become sensitive and show the management repositories that have problems by squawking. Once the source of the problem is found the user can zoom into the model and ignite the issue or actual document that is the matter of concern.

25 As shown in figure 1 contracts, laws and rules 8 can be applied to communications by inserting a applet tool which will link you to further and more refined particulars. The number 8 between the 5th and 6th loop in the display notes the applet tool. The law or rule is applied to the data flow and type, which a criterion that has been given and should the incorrect data flow or type arise the data will be
30 stopped and the user will be alerted and the type of data changed or corrected. It will do this by only allowing communication through the contract conditions of the applet inserted, which is small application.

As shown in figure 5 a typical repository has sub components that have an array of circles, which are shown in figure 5 and 6 as a limit 9. These circles are labelled 9
35 and when ignited have criterion to diagnose and create limits 9 on data flow and type. If the data flow or data type reaches unacceptable proportions it is the

criterion put in the limits 9 between the functions of the repository 47,48,49,50 and the storage repositories 42 that creates trends against a baseline for the display to shrink and grow according to data and document type. It is the intersection 11, which is described in more detail in item 11 of this document to tell how the software does this. Limits 9 and arrows 10 act as the filter to catch documents that do not meet the form or level of quality and risk in the project, which was defined before the organisation started which I have define in the Glossary of Terms as the baseline. The limits 9 may be calibrated in figure 1 by the interpreter 29 should the display be regarded as to sensitive and it is this calibration that tunes the way the display squawks and indicates risk to the user when the user interprets 29 the display and the data in figure 1. Limits 9 are given to management repositories 3 so it is visible to ascertain the maximum weight of data in the management repository 3 for any given storage of data and data type. Once the maximum have been reached the repository grows until it visually touches the limits 9, when it visually touches the limits 9 it starts to age and as time passes the management repository 3 changes colour to denote a problem. If unanswered or if the problem is not possible to be automated the display squawks or vacillates displaying a risky situation in the organisation. The program cannot work without predefined limits. The limits are directly connected to the organisation external environment discussed in the earlier section of the patent. As the project progresses along the time axle 6 different risk act on the project hence the external environment changes.

Input & Output arrows are shown in figure 2,5,6,8 and are illustrated as an arrow in the legend figure 27 and is numbered 10, 10 an arrow is a symbolic shape that shows you the data flow in the matrix between storage repositories. The arrows noted are displayed in different figures 2,5,6,8 as input arrows or output arrows. The arrows when ignited reports data flow against time, which dictates expectation of the amount of work being carried out in the management repository 3 or sub component figure 6, hence an arrow derives quantity whilst the limits as discussed derives quality and risk. Once a quantity of data flow is derived against a risk or quality criterion inputted into limits 9, a trend is created against time and against the baseline, this governs the squawk of the display as the squelch 29 is enacted. Squawk is a term I wish to use as the way the display expresses itself. As the weight of data flows through arrows 10 a criterion is applied via limits 9 to all the different data flows before it reaches the storage repository 42 figure 6 from the functions area figure 5,6 number 47,48,50,49,47 each data flow rate calculates a trend against the baseline trend. Where the baseline trend collides with current trend, it is the collision point between the to trend lines where the display squawks.

Quantities reports of work levels are generated from the arrows, which allow us to assess data weight in the repositories and data weight out of repository.

As shown in figure 2,5,6,8 intersections 11 shown in the legend figure 27 is where data type and content of data is scored and tallied to create a document weight or value. When a document from a function component 47,48,49,50 crosses a limit 9 and is filed in a repository it is already scored by type and size automatically in the software however some documents content can only be scored manually. If the document is not scored there is a problem. If it is scored then the document has acceptability. After the score has weighted the document based on content, the document is re communicated across a limit then the weight will be carried with the document until a filter picks up the size of the weight at the document destination and when it comes to an intersection 11 the document will be further weighted until the weight of the document turns into a non conformance or dispute or just a problem to be resolved between the parties that the document is connected too.

As shown in figure 1, the Australian flag 12 in the bottom right hand side of the screen denotes send. The send button is used when a document is to be communicated to an address outside the project environment hence the document is being sent doesn't interfere with the project communications or project data weighting system. It would be usual to receive such a document into the program in team tools and techniques 27 and shown in figure 1 and 9 to the bottom of the page before the document is filed. Tools and Techniques 27 is an inbox from sources both inside and outside the project. The inboxes in tools and techniques are divided into project sectors and the relevant teams attention is filed into a management repository 3, for dissemination to the correct and relevant document destination. The document is ignited and the send button pressed to send the document automatically to an address with a destination outside the project.

As shown in figure 1 number 16 shows a section of a loop, which shows a section of figure 4. Applet tools 13 are small applications shown in figure 4 that are used to insert information into the display which set up laws and rules of communications, create control point in the project, indicate milestones, gauge performance and alert what should be done at a particular point in the display on the screen where data is flowing. These applets 13 are inserted into different links in the matrix. The applet 13 can increase functionality or create restrictions in various parts of the organisation. They are small applications that can be emailed easily to different parts of the organisation to upgrade quality and risk parameters.

They can be latched on to communications spokes such as figure 4 which creates a barometer of how the repository is performing or not performing in the organisation, hence the centre being poor and the outer rim being the highest score. They then can be joined via a line 13l to give a centre 13c, which displays a
 5 positive, or negative position on the screen in that project.

As shown in figure 1 No 14 the product repository 14 is described by the symbol shape of a triangle and is numbered 14. This repository is at the end of the time axle 6 and is to the right screen, which is in figure 1. The weight of this repository is 100 and is the sum of all the weight in the management repositories 3. When you
 10 ignite the product repository 14 it has the same components as the stimuli 1 and the management repositories 3. It has access to all the data functions and processes in the project and provides the basis of budgets and progress. It is this repository that is used to establish the difference between budget weight and progress weight and indicates where the greatest weight lies in the project or organisation which intern
 15 alerts you to where the greatest requirement of quality should be used in a project or organisation to mitigate risk. It is the product repository that creates the trends with in the project against various criterions in the project.

As shown in figure 1 No 15 all the repositories 1,3,14 when opened and shown as typical repositories in figure 5 display a stimuli 1 surrounded by functions
 20 47,48,49, 50 and further detailed in figure 6 and sub figure 6.1. If you ignite 50 in figure 5, figure 8 will appear which is process management. Process management is displayed by the curved line in figure 5 and is numbered 15, which is between two sub-components 3 and 46. The process management repository shown in figure 8 has process events 51, which are a chronological, order starting from the owner
 25 sub repository 46 and is labelled 51/1. This process crosses another process loop found in the same repository and is shown with events of a process labelled 52 which starts between the arrows next to the owners component 46 and is labelled 52/1. Around all process events 51 and 52 is a further loop of events that further define a process, which is depicted, by a loop with process events labelled 53. On
 30 figure 8 the process is flagged with a number event 51,52,53 which distinguishes where the process is located in the display and graphical shows the way the intellectual process precedes in the display. The process creates work methods, risk and quality mechanisms as it relates to the stimuli 1 in the organisational repository at differing points and is a filing system for creating processes to instruct tasks.
 35 Different processes have an association with a given stimuli 1 as the stimuli 1 determines the process. When the process is ignited it displays all the processes that are available in the project that have been used with regard to each stimuli 1.

As shown in figure 1 No 16 the communication axle is represented by 16 and runs parallel to the time axle 6, which is connected, to the stimuli 1 and the product 14. The communication axle has sub components relating to communication process, type and attributes. All files associated with the attributes of communication are
5 filed in the central communication axle. This axle is the main communications link between human resources hubs 2.

As shown in figure 1 No 17 scope 17 is shown in the matrix as a line running parallel with the time axle 6. Scope in the project is a barometer of progress with regard to the progress of scope in the project. Should one ignite the scope bar it
10 will give the progress against the baseline visually, it will provide all the scope documents filed in the project and provide a trend that will give a forecasted date of completion of scope. Scope of the project runs from the stimuli 1 to the human resources hub 2 at the 5th loop where the line continues in a different colour as procurement 18 of the physical project. This scope axle is a secondary storage
15 facility for all scope documents in the project.

As shown in figure 1 No 18 procurement 18 is a barometer for the project and acts the same as scope 17 however it is where all documents are stored as a secondary repository with regard to obtaining labour material plant and equipment for the physical construction of the project. The procurement barometer displays progress
20 against baseline and when ignited provides sub components that enable project human resources to procure goods and services to the organisation via different communication methods.

As shown in figure 1 No 19 is a graph known as the value barometer, which is located to the left of the screen and runs along the y-axis and has been flagged as
25 19. The barometer's length is decided by the Y-axis external parameters however it always has a total weight of 100 or the total value of the project when the project is finished hence the barometer and graph provides an indicative percentage complete of the project during progress. In the case of an organisation 19 can be switched to show the share market value of the organisation depending on the external inputs.
30 In figure 1 and next to 19 is number 34, which allows you to insert a figure of market value. When the market value is inputted to 34 each management repository 3 via the weight or value of each repository calculates the organisation market value for each repository, this data assists in depicting which repositories are best retained inhouse or which repositories should be outsourced to another
35 organisation. The market value weight less the product value weight provides the risk capital weight of project and risk is denoted by the z-axis hence the third

- dimension of the matrix giving the model its depth or how much fat (profit) is in the project compared with value on the Y axis. 19 is the barometer of value as the project progresses and shows the market weight not necessarily by currency of value but data value of the project giving the budgeted value against the market
- 5 value as the project proceeds.

As shown in figure 1 No 20 risk capital is calculated by determining market value less product value. This value is represented by 20a and 20b on the z-axis at the right hand end of the screen. This is merely a barometer for the project, which visually shows risk against baseline risk of the project.

- 10 As shown in figure 1 No 21 is cost to change or potential to add value which runs diagonally across the screen from left up to the right and labelled 21. This line provides a graph of adding potential value to the project and the cost to change the project at different periods in the project life cycle. This line can be base-lined and as the project progresses an additional graph marks progress against the budgeted
- 15 baseline. You are able to click on the line labelled 21 and ignite a repository, this repository will intern interrogate the cost to change and the potential to add value to the particular repository.

- As shown in figure 1 No 22 is point of no return, which is labelled as 22 and is displayed as a point where there are only enough resources to get to a particular
- 20 milestone and insufficient resources to get to the next milestone or completion of the project. This calculation decides which milestones that the project cannot go any further with out an injection of more resources. Consumption or burn rate of cash will indicate where the project crash point or point of no return 22 will be displayed. This point is symbolically noted on the time line to the upper middle of
- 25 the screen where the value or weight is displayed at a point of no return 22. A value can be inputted to provide a scenario of how many resources will be required to get to the next major milestone. This point is found by interrogating the repositories that provide the trends and intersections of where the point of no return is from the weighted data and data types in the databases of the repositories.

- 30 As shown in figure 1 No 23 Human resources reports are divided into 23,23a 23b 23c 23d and are symbolic criteria to interrogate repositories to report who in the project is forming a team 23, which team is having a lot of disputation 23a, which teams have resolved problems 23b, which are the best performing teams 23c and which teams are closing out 23d.. This information is reported from data and
- 35 document types, which are being transmitted through the project from stimuli 1 to

product repositories 14. This is merely a search field finding percentage complete of project tasks in sub projects of the organisation.

As shown in figure 1 No 24 life cycle of project is located at the top of the screen and is represented by 24, 24a, 24b, 24c and not limited to 4 phase life cycle. Each
5 phase of the life cycle can be labelled from a database, as it is applicable to stimuli. When a part of a life cycle is picked from a database according to a stimulus. The functions, processes, repositories, forms, communications etc attached to the stimuli for that part of the organisation or project are automatically installed in the matrix to form the organisation as a template which can be edited to perfectly suit
10 the matrix for the precise stimuli. Hence defined elements from other projects or organizations can be created from different projects and life cycles of projects creating new projects. For Example Initiation & Concept of house may also be used for a hotel, Planning & Development of a car might also so be used for a motor bike, Implementation and execution of a bridge might also be used for a road
15 and Handover for a space shuttle might be the same as a ship etc. If the processes for each product are alike a project or organisation for each phase of the life cycle can store its elements under a stimuli for each phase of the life cycle.

As shown in figure 1 time at the top of the project screen is labelled as 25. Time 25 shows actual time whilst the time axle shows dates of milestones that are required
20 to be achieved. The software calculates real time against project time, which gives a value at 25 indicating that the project is ahead of schedule or behind schedule. You can also ignite a repository and click on time and it will show when the work from that repository is required and when you can start. It has a roll down gnat chart, which is automated and does not need to be built or updated as the time is
25 fully automated from data flow. Time 25 carries out some of the functions such as time stamps on documents, provides version control, accounts for labour cost of the project, determine progress, builds trends for forecasting, calculates burn rate of money, establishes point of no return, determines disputes and is not limited to the above. These are all automated in this software program and are accessed in the
30 display.

As shown in figure 1 toolboxes are located to the bottom of the screen and are labelled with the number 26 and detailed further in figure 9. The toolboxes are labelled with the methods of practice used in that section or part of the life cycle of the project as it applies to the stimuli 1. In the toolboxes are applets to insert in to
35 the matrix to use as control points to enhance project out comes and apply controls in the project. Each toolbox has a kit of tools that are pertinent to the stimuli 1.

Each stimuli 1 will have different tools and this is the area the tools and techniques are filed in small applications called applet templates.

As shown in figure 1 is inbox's located at the bottom of the project and labelled 27 and further detailed in figure 9. This is the area of the matrix that all documents
5 come into the project for dissemination and filing in different repositories. The area of the inbox is located at different phases in the project life cycle. As discussed earlier as each document is highlighted in the inbox the display visually shows the document origin and destination on the screen as a line.

As shown in figure 1 No 28 and further detailed in figure 9 outbox's are where
10 versions of documents are put for perusal by other parts of the project to comment on before further versions are built, the area of the display is more over a notice board.

As shown in figure 1 No 29 Interpreter and Squelch is located to the right of the screen under the scales 7 of the project and is labelled 29. As time is attributable to
15 every repository and the basis for calculation throughout the matrix the squelch moves time forward and back in the project which intern creates sensitivity in the display of the project. The time components of management in the repositories are moved forward and the most volatile repositories at risk will squawk hence alerting a manager to mitigate risk in that part of the project. The interpreter 29 finds where
20 current trends clash with baseline trends hence making the software squawk. It has two functions to find where the project can be accelerated and where the project is at its greatest risk as it applies to time.

As shown in figure 1 Composer 30 is located at the top left hand side of the screen. The composer ignites a cascade of template documents to compose. The document
25 is then automatically had a file name produced and files the document to a repository.

As shown in figure 1 Filer 31 is located at the top left hand of the screen and is used to file documents in the organisation. The filer gathers data from different sources and files the data or information in a repository, which automatically provides a file
30 name for the document when stored in a repository.

As shown in figure 1 Communicator 32 is located to the bottom left of the screen. The communicator ignites and opens up a selection of hardware is used to communicate and when you select a destination the document is sent to the chosen destination.

As shown in figure 1 Searcher 33 is located to the bottom left of the screen. The searcher ignites and igniting different repositories enables a key word search of documents. When search is activated it searches repositories in the project or outside the project for the said keyword search.

- 5 As shown in figure 1 No 34 value is located at the top of the value barometer and shows the project or organisational value. This is where the organisation value of the project is inputted and calculations are made from this value back down through the system to forecast repository values. This input can be fixed or floating as the need maybe providing scenarios.
- 10 As shown in figure 1, No 35 is an input or out put of time, which the system calculates against and can be fixed to provide scenario's or floating to provide project time. If you put in a time that is short the system will squawk and if you put in a long period the system will be stable however cost will change and generally indicate a value 34, which is high.
- 15 As shown in figure 1 No 36 is an input or out put of risk capital that has been assessed through out the project from the weighted system and gives the model it breathe hence a three dimensional model. This risk factor can be made up of several variations of risk from different repositories or calculated from various major repositories.
- 20 As shown in figure 4, No 37 is a 100 % positive quadrant where the well performing repositories move to as the scores from the intersections 11 are tallied and determined the repositories gravitate to different quadrants.
- 25 As shown in figure 4, No 38 is a positive negative Quadrant, which shows potential problems as compared to other repositories as the scores form the intersections 11 are tallied and determined the repositories gravitate to different quadrants.
- As shown in figure 4, No 39 is a negative repository and is the most likely repository to have problems hence the worst quadrant. When the score for the intersections 11 are tallied and determined the repositories gravitate to the different quadrants.
- 30 As shown in figure 4, No 40 is a negative positive repository and is the most likely repository to have some problems and it is in this quadrant, when the scores for the intersections 11 are tallied and determined the repositories gravitate to the different quadrants.

As shown in figure 4, No 41 is the applets 13 are put on the spokes of communication as a scored sliding scale; these denote the actual Quality or Risk on each repository as interrogated from data and data type and scores given during the project. 13 outline the repositories performance and give it a risk or quality centre
5 that can be seen by all to improve or repair processes that lead to the outcome. The Risk centre is denoted by the 13C.

As shown in figure 5, storage repositories 42 placed in the sub-components of the stimuli 1, management 3 and product repositories 14. these repositories store data and can be labelled from a database.

10 As shown in figure 5, arrows 43 denote flows of data already discussed in Item 10 of this documents.

As shown in figure 5, No 44 is the stimuli in a sub component called material.

As shown in figure 5, No 45 is the stimuli in a sub component called plant

As shown in figure 5, No 46 is the stimuli in a sub component called owner.

15 As shown in figure 5, No 47 is the knowledge component 47 of the function area of the display which is a storage area for knowledge to be used with a particular stimuli.

As shown in figure 5, No 48 is the reason component 48 of the function area of the display that is a storage area of reasons to do the project as it applies to the stimuli.

20 As shown in figure 5, No 49 is the tasks component 49 of the function area of the display that is an area where tasks are stored ready to be executed as they apply to the stimuli.

As shown in figure 5 No 50 is the process component 50 is the function area of the display that is an area where processes are stored ready to be executed as they
25 apply to the stimuli and further explanation is given in figure 8.

As shown in figure 8, No 51 is a process event 51 and is part of a process which is required to be executed before the next event is carried out.

As shown in figure 8, No 52 is a sub process event 52 and is part of a process, which is required to be executed before the next event is carried out.

As shown in figure 8, No 53 is a minor process event 53 is part of a process, which is required to be executed before the next event is carried out.

As shown in figure 7, No 54 is a symbolic description of mental focus from the human resources hubs 2 to the management repositories 3. If you ignite 54 all the brainstorming activities from the particular human resource are activated from the database so the project can see the ideas from different sources.

Shown in figure 9 is a blown up version of the tools and techniques in and out boxes that are displayed in figure 1 and are numbered 26,27,28. Each box can be labelled from a database that is pertinent to the stimuli 1 and stored for similar projects or organizations.

Shown in figure 10 is a labelled project with an ignited repository. Communication spoke 55 that acts like a rubber band when a repository ignites 56. The communication spoke 55 is always attached to the stimuli 1 and numbered 57 on this drawing. 58 is an applet that was attached to the communications and it moves as the repository 56 and repository 57 explodes with the stimuli 59 in the centre of the exploded repository.

Shown in figure 11 is a generically labelled matrix ready to start a project.

Shown in figure 12, is a generically labelled matrix with the barometers installed and labelled as follows 60 value, 61 being risk and political sensitivity, 62 communications progress, 63 procurement progress, 64 scope progress, 65 cost to change and potential to add value, these have already been discussed at some length earlier in the document.

Shown in figure 13 is a description of a cascading menu, which ignites as the cursor is placed over a matrix object.

Shown in figure 14 is a description of how the software works and is an executive summary.

Shown in figure 15,16 is a description of how the software shrinks and grows.

Shown in figure 17 is a description of how the software is weighted.

Shown in figure 18,19 is a description of how the software creates security in the 3 dimensional interfaces.

Shown in figure 20 is a description of how the net work administration works.

Shown in figure 21 is a description of the devices that the software works on.

Shown in figure 22 is a description of of a wide area network that the software works on.

Shown in figure 23 is a description where the software is used on a local area
5 network.

Shown in figure 24 is a description of where the software is used with an application service provider.

Shown in figure 25 is a description of where the software is used with a single user.

10 Throughout the specification the word "comprise" and its derivatives are intended to have an inclusive meaning rather than an exclusive meaning unless the context requires otherwise.

It will be appreciated by those skilled in the art that many modifications and variations may be made to the embodiments described herein without departing
15 from the spirit or scope of the invention.

CLAIMS

1. A method of displaying on a display means associated with a computer, the structure and content of a filing system including filing system data that relates to an organisation or a company or a project that utilises electronic data files,
5 said method including the steps of displaying symbols in a matrix arrangement, which represent a model of information flow and knowledge in the organisation.
2. The method according to claim 1, wherein the symbols are displayed with different shapes and/or colours.
3. The method according to claim 2, wherein by displaying different shapes and
10 colours composed documents are filed into differing taxonomies within the organisation matrix.
4. The method according to claim 3, wherein the method includes the steps of composing, communicating, interrogating, searching, interpreting and filing documents and information data.
- 15 5. The method according to claim 4, wherein the matrix is used to represent an entire company or organisation on a single screen of the display means.
6. The method according to claim 5, wherein multiple organisations are displayed by a matrix of a single screen.
7. The method according to claim 4, wherein the matrix is composed of storage
20 repositories which are displayed as the shapes, the storage repositories are separated from each other and interconnected by lines which represent communication.
8. The method according to claim 7, wherein the data is input into the electronic data files which changes the data contained and shown by the shapes.
- 25 9. The method according to claim 8, wherein the the shapes shrink and grow according to data weight, which is a product of data volume, data type, documents and document types filed in the system.
10. The method according to claim 9, wherein the shapes change colour according to time after an action has taken place, the shapes being interactive when a
30 cursor is held over the shape.
11. The method according to claim 10, wherein the shapes appear to explode on the screen when the cursor is held over the shape for an extended period of time, when the shape explodes the contents of the shape are visible.
12. The method according to claim 11, wherein the shape is associated with
35 cascading menus which propose questions and a user selects the answers so, the computer can make calculations, which change the shapes, visual attributes and arrangement.

13. The method according to claim 12, wherein the matrix is built in 2 or 3 dimensions depending on complexity of external forces on the organisation, the inputs, which are linked to external data, move the shapes of the model.
14. The method according to claim 13, wherein the matrix has a central axis called
5 a time axle, which appears hollow and has several sub components.
15. The method according to claim 14, wherein the time axis runs from stimuli to product and has many components which are time related to the organisational display such as date, time, location, author, origin, destination, composing time, version etc.
- 10 16. The method according to claim 15, wherein the data is filed and filtered at different points known as intersections and this is where the weight and type of data is stored, each document and data is valued and trended against time, which enables the project to establish different criteria to manage and automate management in an organisation, all documents are stored in the central
15 repository and filed by chronological order and other unlimited attributes that assist in weighting data and documents.

Matrix or Display of Screen

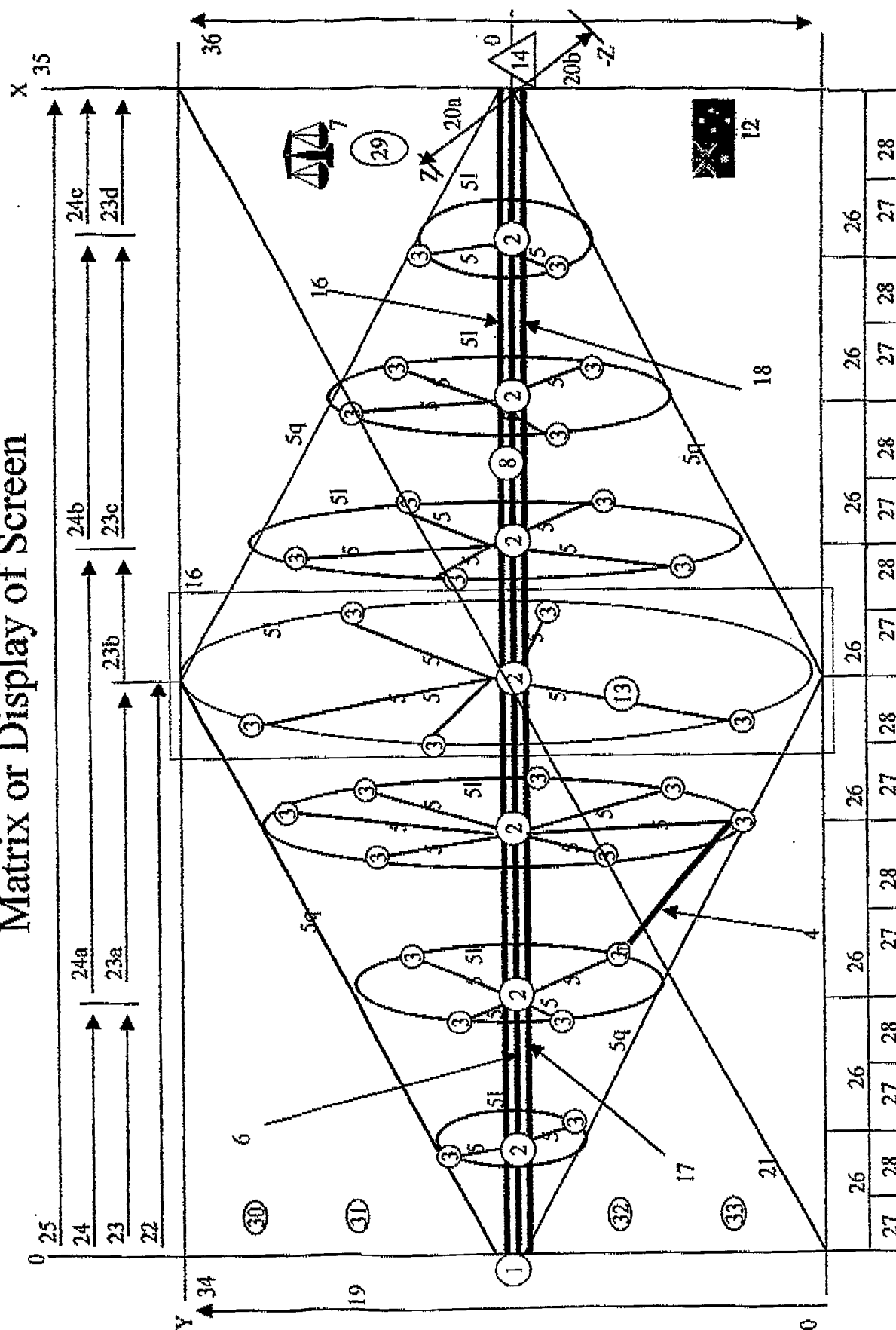


Figure 1

Organisational Environment Parameters

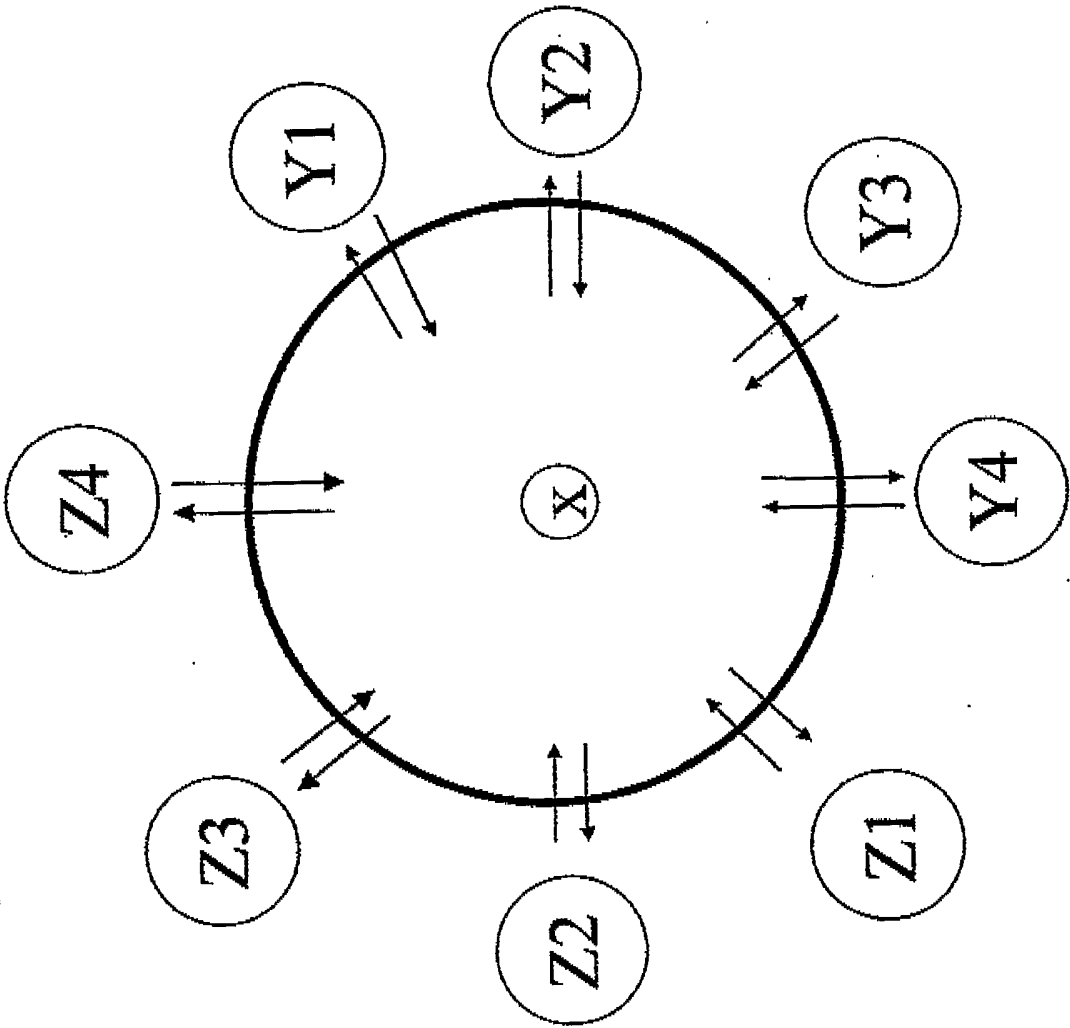


Figure 2

Organisational
Parameters

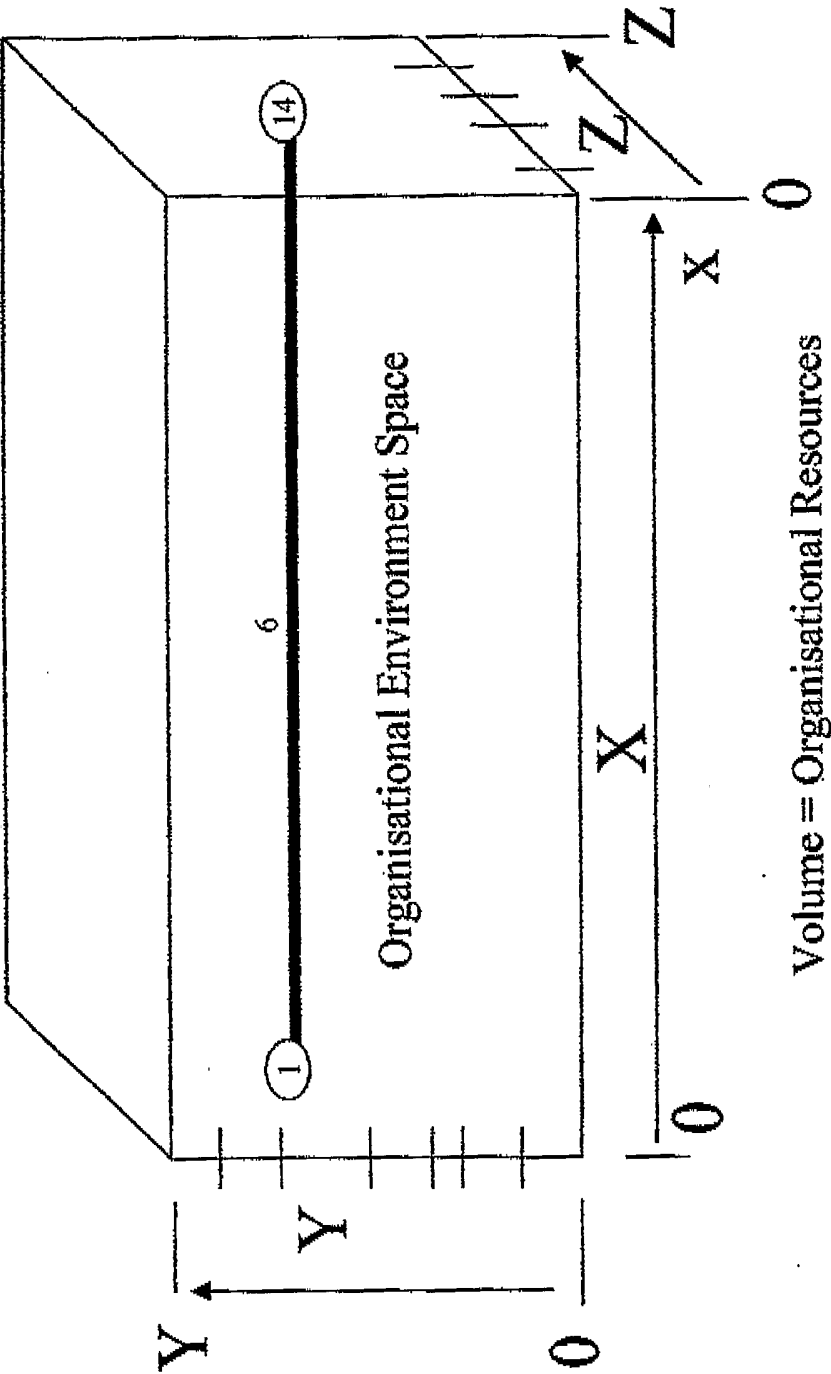


Figure 3

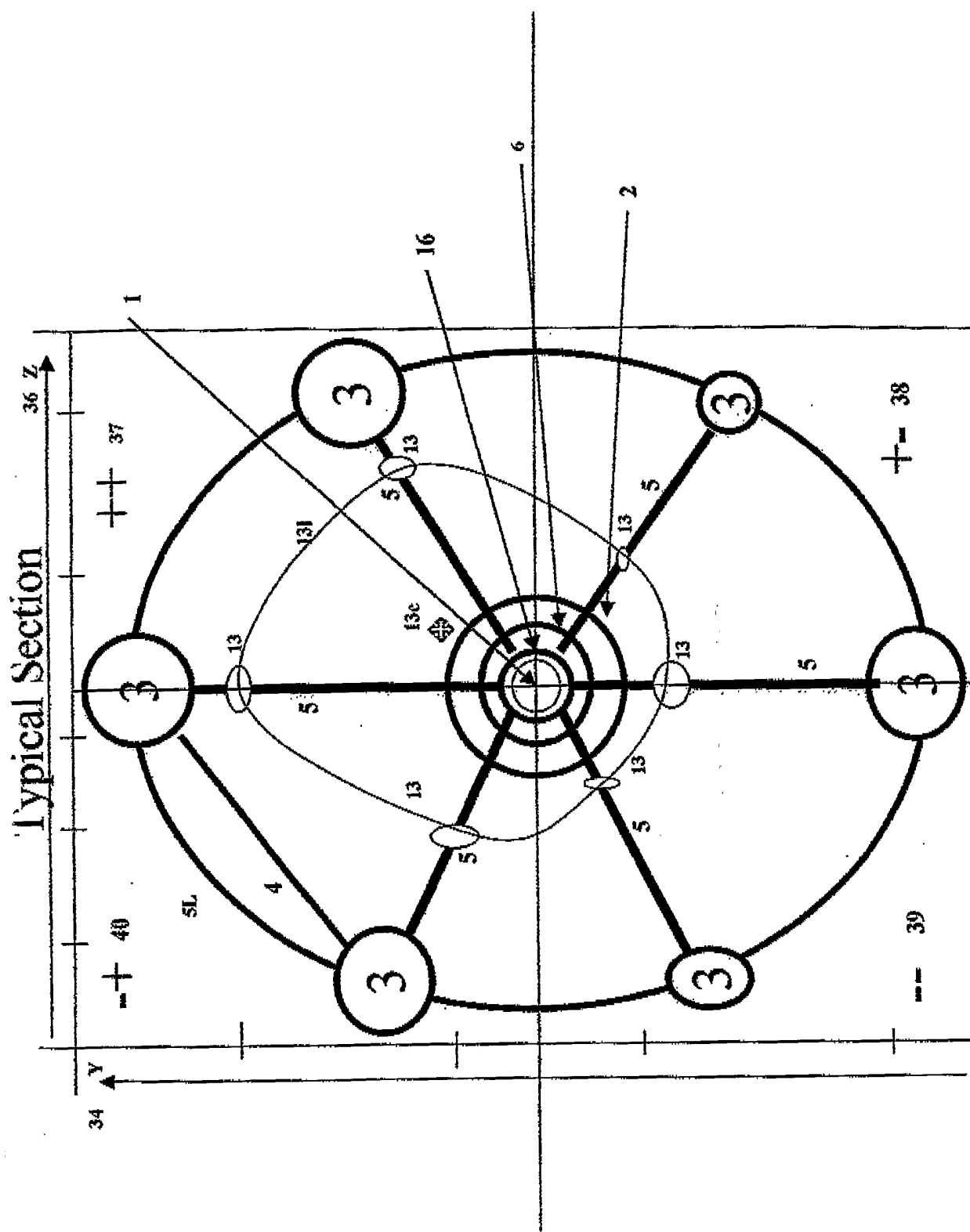
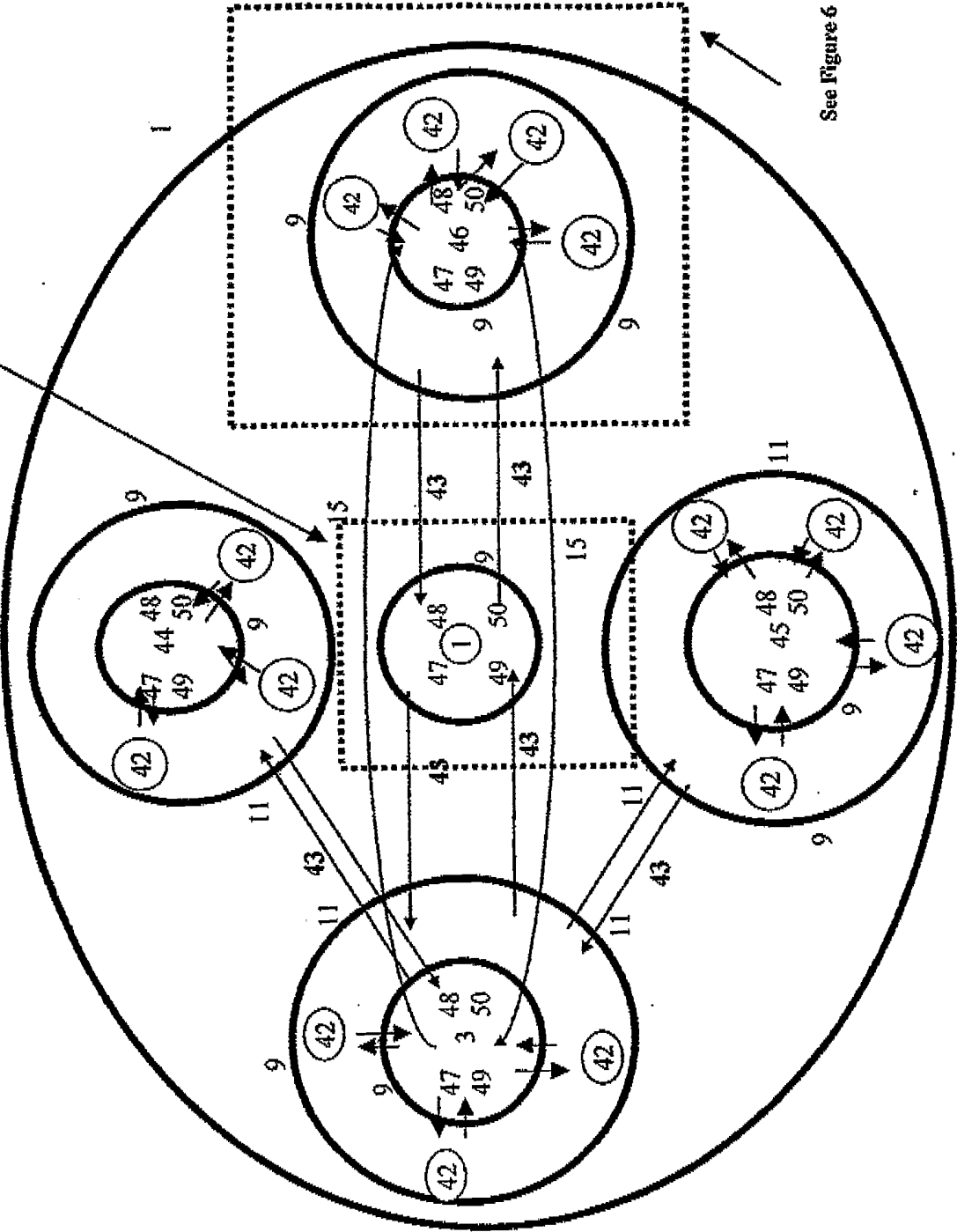


Figure 4

Typical Repository

See Figure 6 and sub figure 6.1



See Figure 6

Figure 5

Typical Sub Component Repository Section

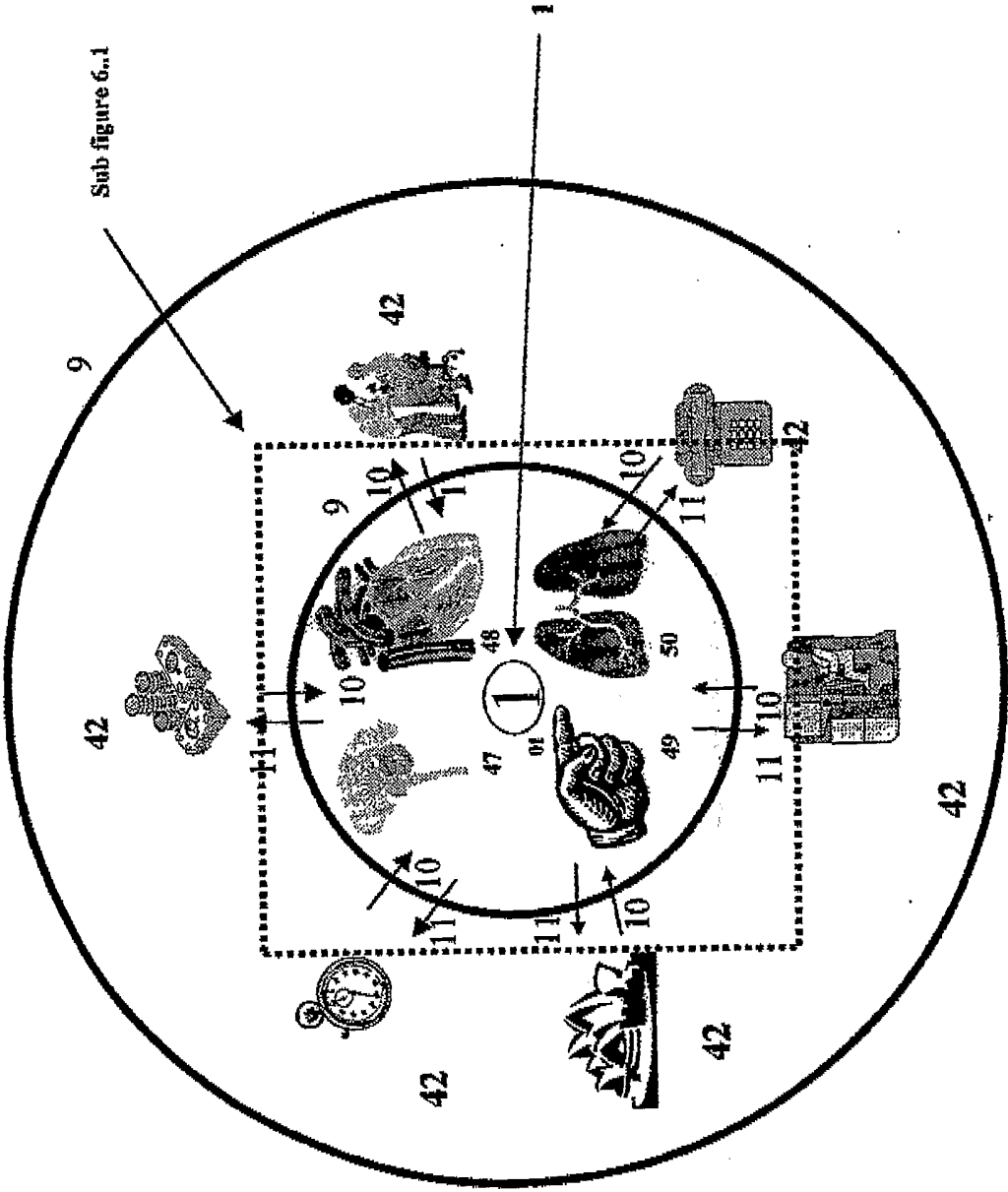


Figure 6

Human Resources Hub

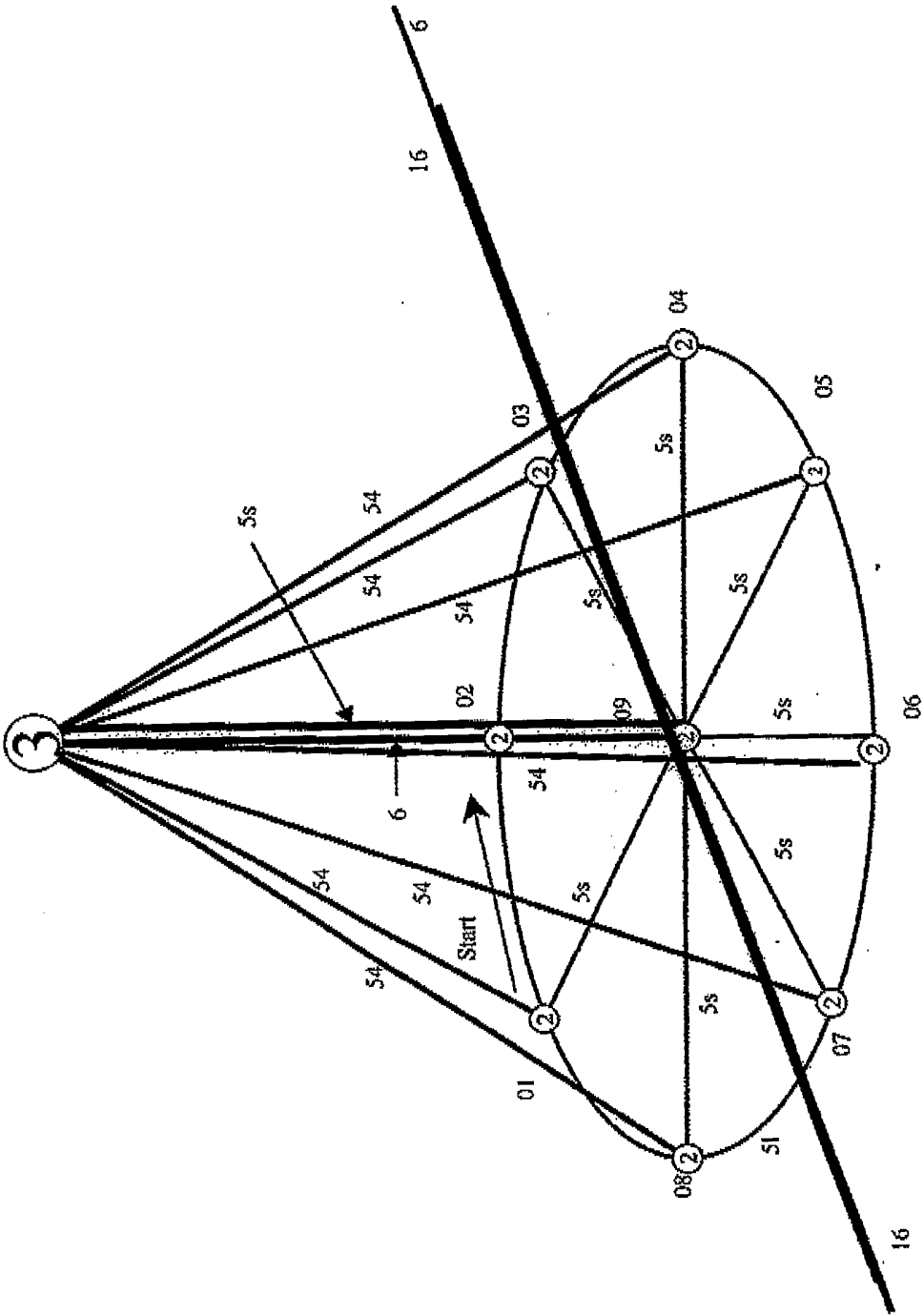


Figure 7

Process Management

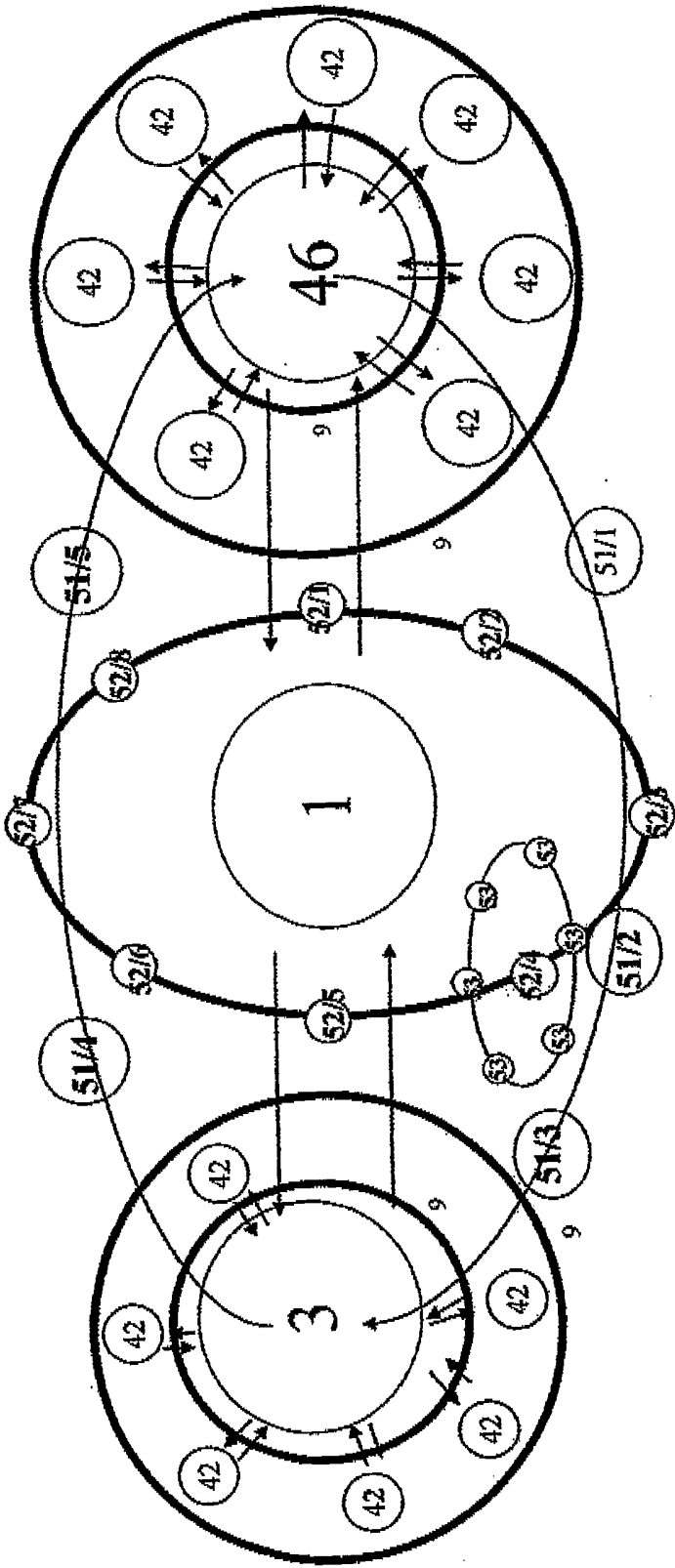


Figure 8

Tools & Techniques

Mission 26	Objectives		Strategies		Tactics		Integrate		Implement		Facilitate		Evaluate	
	Inbox	Outbox	Inbox	Outbox	Inbox	Outbox	Inbox	Outbox	Inbox	Outbox	Inbox	Outbox	Inbox	Outbox
Inbox 27														

Inbox is where Tasks and issues are listed for the relevant Teams

Outbox is finished documents what has been sent from each team.

Figure 9

Applets Zoom Up to Screen

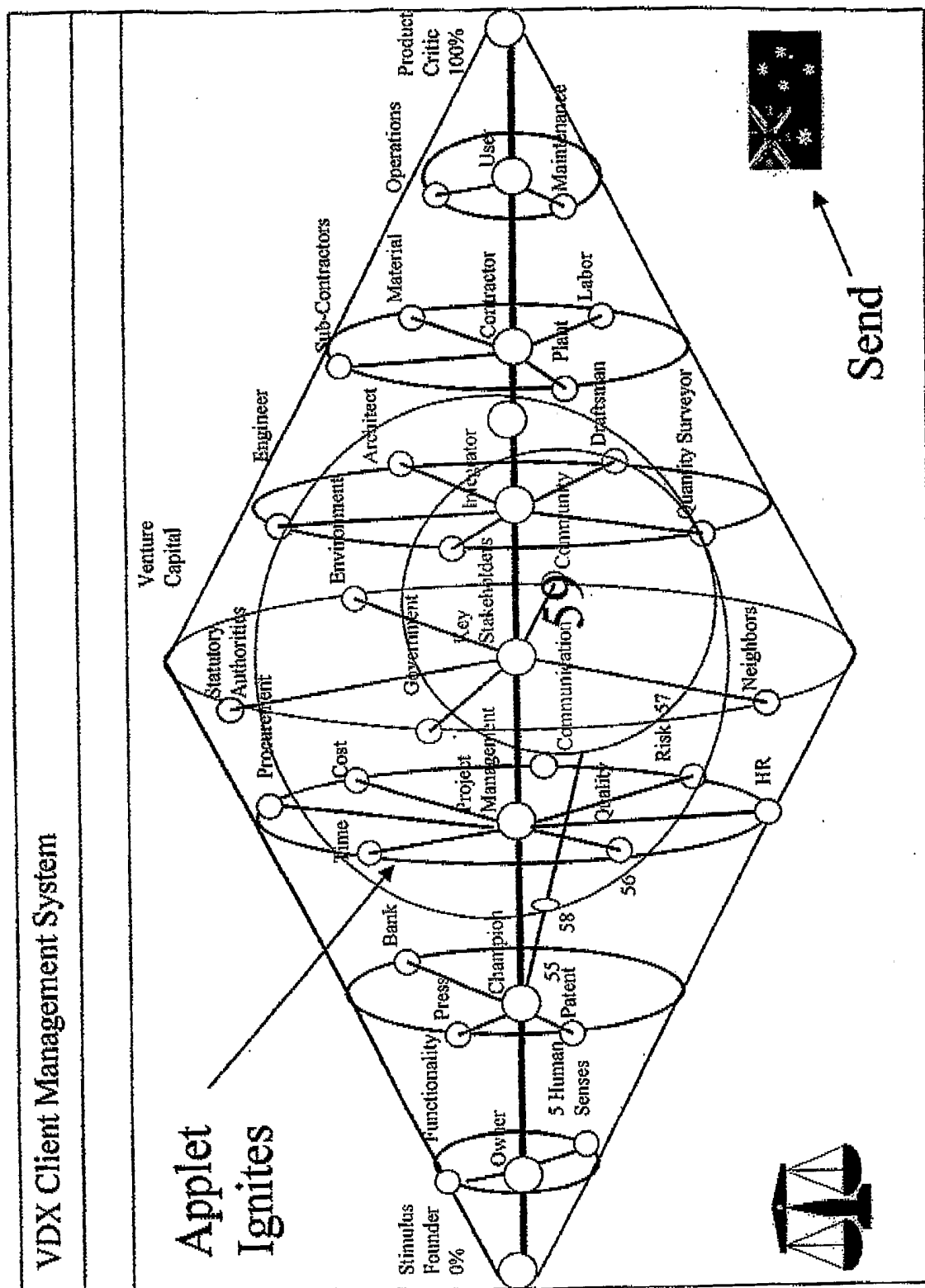


Figure 10

Ignite objects and Send

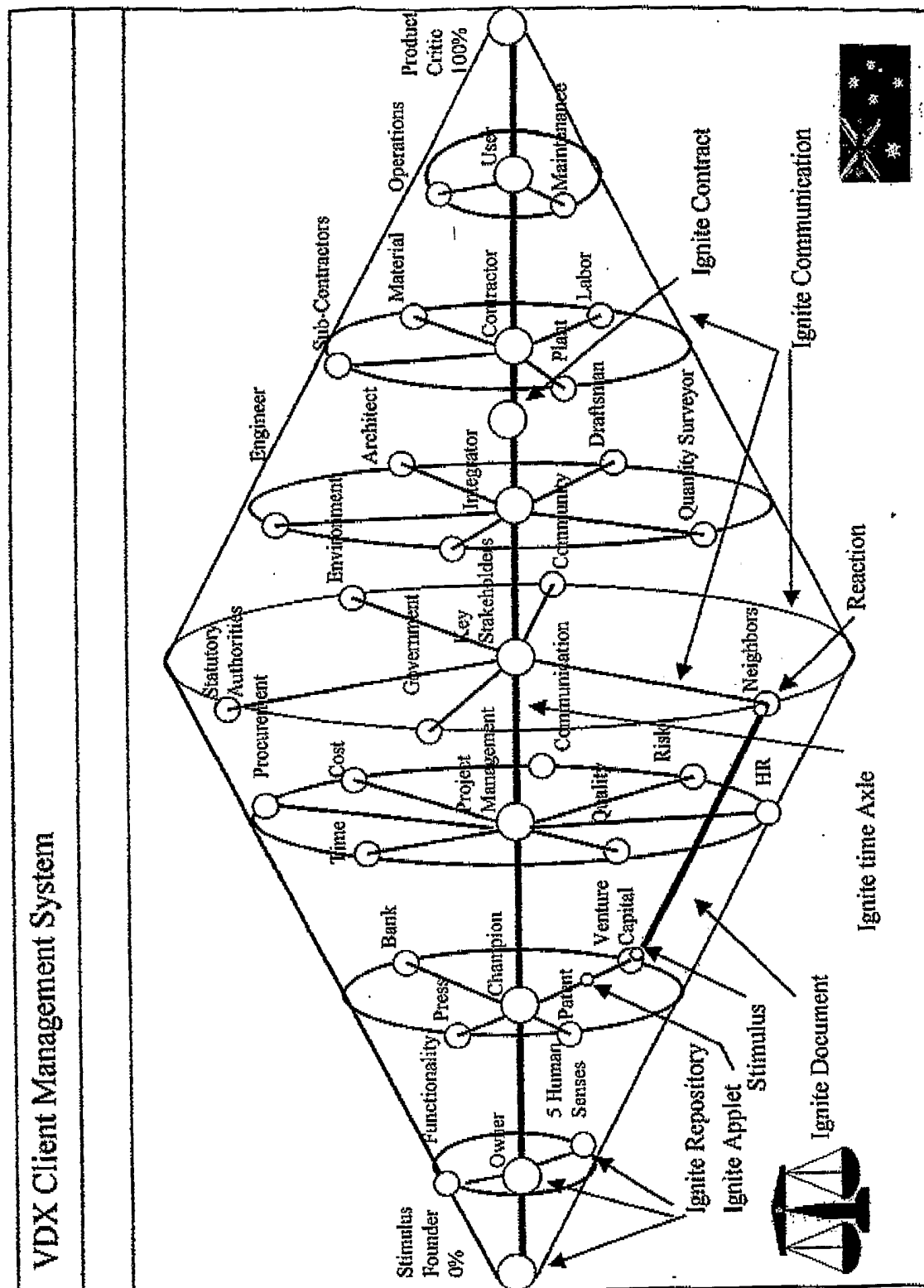


Figure 11

Model Barometers

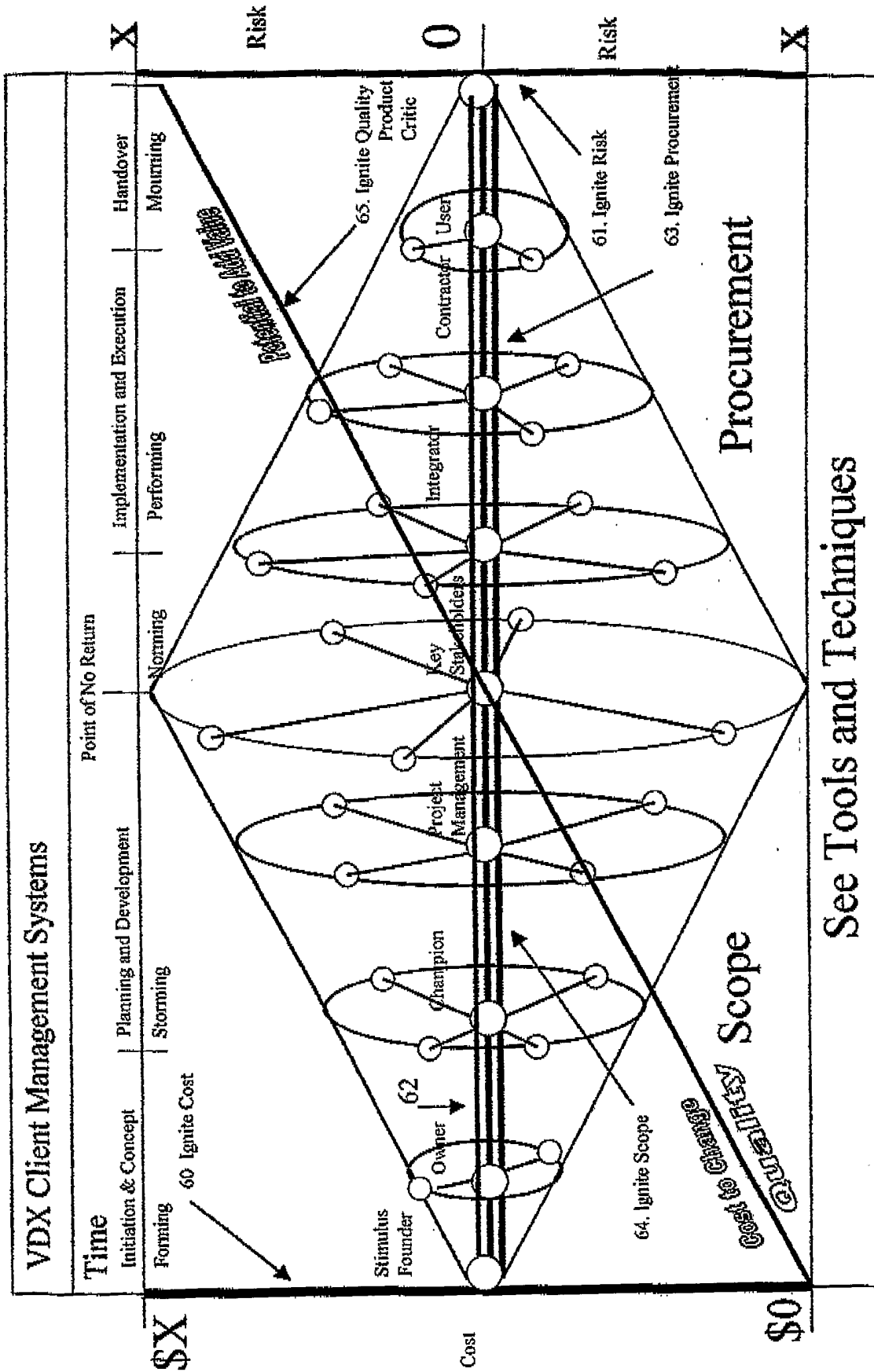


Figure 12

Ignite Repository Destination and Compose

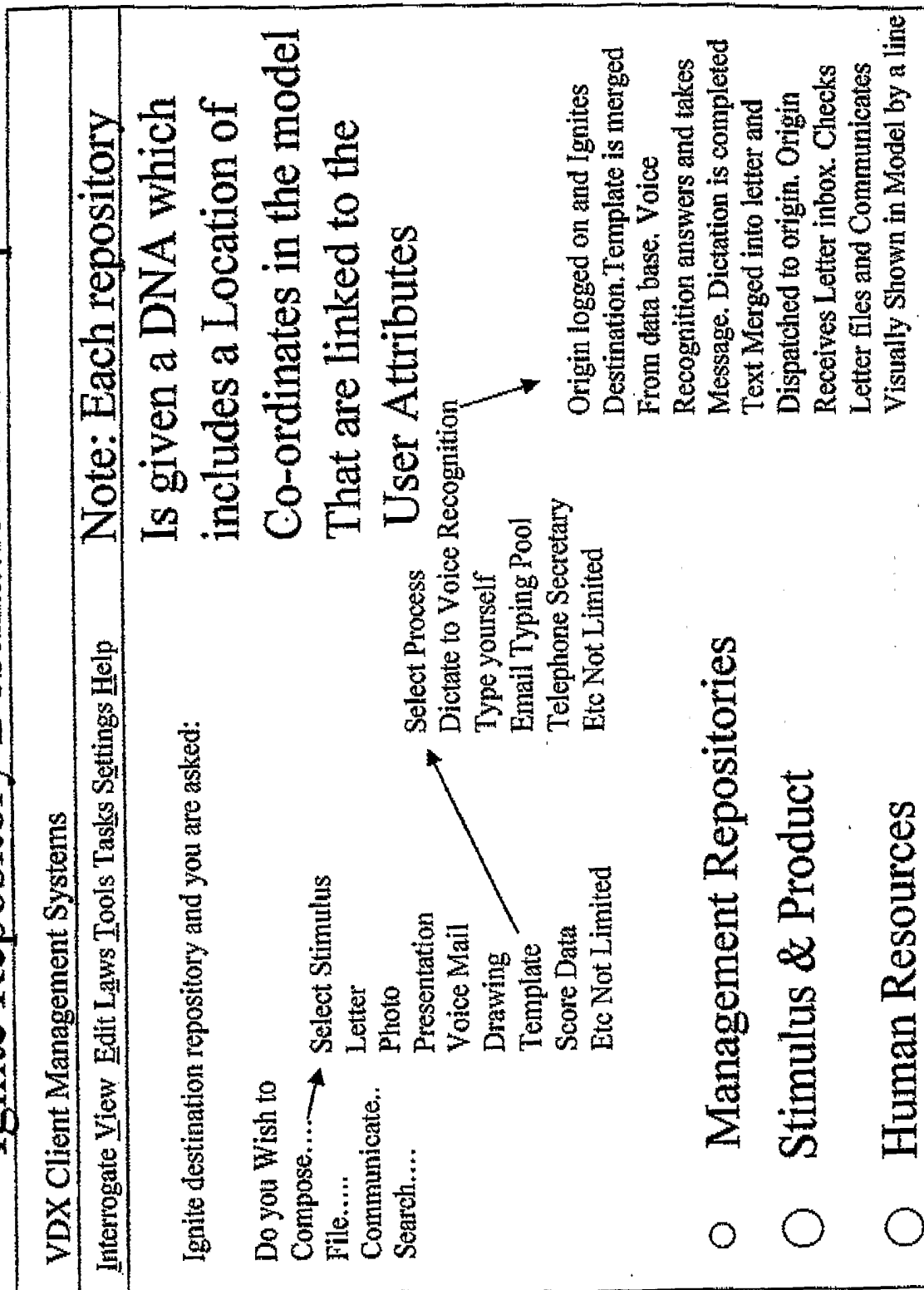


Figure 13

How it Works

As the model is built in a 3 dimensional platform each visual line, sphere, pipe or loop etc has co-ordinate to display their location. The location co-ordinates form a location address which is labelled on to a flag that is blown across the screen so that no matter how the user is viewing the model the flag always displays the flags label towards the screen so the user can read the flag.

Each Co-ordinate becomes the address of each repository. As the repositories moves and the matrix or display shrinks and grows so do the addresses hence addresses change, whilst the objects are linked to the organisational model matrix or display, all persons with in that project can always find other repositories in that project. For external persons using the same portal they are unable to hack in to the project easily as the repository addresses change regularly hence security of the repositories are not static.

Matrix or display shrinks, grows, vibrates changes colour and texture on the screen to denote a real time action in the matrix or display. The matrix or display client is not a processor it is merely a communication tool that writes messages to a processor on a server portal that runs applications to carry out tasks hence it is able to work on hardware such as phones like the Nokia 9210 communicator phone or similar palm computer with an especially made Pen that has ink as well as a pointing device with different selections such as Compose File Communicate Search and a control as well as an Ink Pen.

The matrix or display server that includes the processor interprets the code that is written by client matrix or display and sends the instruction to the portals processor that interrogates the data bases, merges the data to the template files and attaches dictation from the communicator to the document which sends it to a typing pool or voice recognition that types the letter or further text is sent to install in the letter from the phone or palm. The matrix or display client is not a browser it is a filer and code writer that enables you to write the code as a macro from a graphical interface by dragging, dropping and clicking on different repositories around the matrix or display hence creating a string of instructions for the portal server to carry out the tasks. It is if a manager is instructing his secretary to carry out a task, the task can then be browsed, checked, communicated, signed off and filed.

To view documents, matrix or display has a normal browser application with in the search facility that enables viewing of documents or plot files to write out documents.

Since the main function of management is to interface management tasks it is not the tasks themselves that the matrix or display transmits. It only transmits the parameters of the document not the document it self. It is the parameters of the document that is visually shown on the screen and it is those parameters that change the matrix or display to make it grow and shrink.

Figure 14

How it Shrinks and Grows

A document in the matrix or display has parameters that make the interface shrink and grow as the management parameters change.

A line is drawn on the screen to represent a document, the following parameters defining the documents as the risk ratings grow against the weight of the element and the element grows to a limit and then the elements function goes in to a loop displaying a scaling up of the repository and aging in time of the repository which is depicted by colour.

All document are kept in one repository and it is that repository that is interrogated to reports differentials in the model. Typically but not limited is a string of the file which each repository has a numerical weight put on each piece of data so matter can be calibrated during construction of the product

Time/Location/Organisation/Project/Personal/Version/Origin/Destination/Client/Server/Document type/Template type/File name/Tracking Issue/Version/Quality Rating/Risk Rating/Time Rating/Scope Rating/Procurement Rating/Cost/human Resources/communication.

Each of the above have a Co-ordinate and to each co-ordinate is a string that creates a label on a flag that is visual to the user, each label if clicked will write code for the matrix or display to compose, file, communicate and importantly search documents. If you have a hard copy of the document, the document will have a barcode that can be scanned to search and track related documents in the data base to create a matter or issue that needs to be resolved.

Also the the pen pointing device is a major requirement to using the model on a small device as the Compose, File , Communicate and Search functions are controlled in the pen which will have a executive style.

Figure 15

How it Shrinks and Grows

s data flows throughout the matrix or display managers rate a document from one to ten that indicates the documents severity on the project as compared to the weight the document or element had in the baseline budget of weight in the organisational model. When a project repository has an amount of data in the repository that adds up to a significant sum. That sum then scales the parameters of that repository which changes its look, size, colour and texture, hence the increases or decreases of a parametric function change the size of the repository. Once the lower or higher limits have been changed and passed the levels of risk determined by the project higher authority, the repository scales up and into a loop hence reducing and increasing the size rapidly of the repository alerting project participants. As the repository is escalating time starts on how long the problems have been going on which ages the repository and the repository actually change colour and texture until the problem is fixed another words embarrassment grows for the human resources in that repository. Hence the matrix or display is moving, growing, shrinking as soon as data is sent to repositories in the project.

Figure 16

Weighting the Matrix

Weighting the model is the bases of managing and automating management tasks. As each repository fills with data a value is automatically established in each repository. For example a model is always 100% with many different repositories anything up to about 58 to 70 primary repositories. Each is weighted from historical data such as a projects profit and loss account or cost center of an existing project that is being built.

As time, mass and unit cost are the only units required to calculate cost of a project it is there fore possible to weight a particular repository from historical data accurately and manage it with few inputs into a data base.

As a project is scaled up or down hence the budgets in the model are scaled appropriately to give quick real time estimates and give the ability to value where the risk lies in the model which tells you where senior or experience managers are required to oversee the organisation. Hence more data more cost for different types of projects. Generally what we are saying is that data is mass and different types of mass have different values of cost. Hence good taxonomy definition will give a mass which will allow us to determine budgets and values of projects accurately.

When VDX interrogates the data base it can assess and locate risk in the project so the project can be managed. Using Newton's Third law "For every action there is equal and opposite reaction it is possible by weight to increase or decrease other management functions to equalize the project problems hence escalating the problem or reducing the problem.

Each of the management functions in the model are weighted and each taxonomy is weighted before the project starts hence enabling one to graph's trends against baseline dataflow which is known from historically correct sources. Type and quality of data collection is more important than knowing a market value. As the market value can only be administrated via a contract where as a weighted value of project substance can be managed to increase automation and efficiencies of constructing and managing a projects and correct placement of people in the right tasks. Keeping people happy.

Hence we send applets which contain documents not just documents.

Figure 17

Security

Security

Matrix or display has its own security system that works in the platform as follows:

1. A model template is provided that has co-ordinates for every part of the model.
2. In a new project the project director scales up or down the model so that all the co-ordinates change hence changing addresses.
3. The co-ordinates of the model are the addresses for communication, repositories, human resources, time location, file location etc in the model with built-in bar codes and parametric functions.
4. If security becomes as problems occur during the project the model is scaled up or down to change every co-ordinate hence from outside the project a person cannot hack into the project unless he knows the scale.
5. Whilst with in the project because all the objects have been changed but are linked they can still see and communicate with one another.

Figure 18

Security

6. If security is a problem within the project the director can move a human resource away from a communication coordinate and the person cannot communicate in the project, this is all done on the visual user interface.
7. Another human resource is placed with in the project at the communication co-ordinate to take over the role of the last person.
8. The model is then rescaled to change every address in the project, which then makes the person who is the security risk blind to the whole project and unable to get back on the project, his screen will be blank except to his repository.
9. The main repository of documents are coded so time and location are the actually file names that produce a bar code on the document. When the barcode is scanned into the computer the computer finds all relating documents called a matter and can chronologically file documents in logical order for presentation for judgement from the main repository.
10. It is important to note that the search facility only searches documents in the main repositories time axle, as the founder's location and time of start is the only static part of the project, which cannot be moved. Hence when the project is replayed it will visually show where problems arose in chronica logical order and who caused the problems, how and when it was fixed and the damage it caused.

Hence a film of the matrix or display can be made showing the project shrinking and growing which details the problems from the baseline template when the project was started.

As VDX is a specially designed processor and exchange device persons in the project can not contact other persons unless it is through there VDX Client Device with the relevant project model. Hence VDX software and device constitute security with in them selves for contact within the project only knows who is in the project not the parameters of the people hardware it is

Figure 19

Administration of Network

Administration of the Network in the matrix or display

As the project is planned the administrator supplies certain tools to the repositories to communicate to assist constructing the product. The repositories have communication parameters and these parameters can be switched on and off in the matrix or display controlling ebbs and flows of data and personnel in the project and off the project. The matrix or display can have its project slowed and resources diminished and re-resourced in real time. The matrix or display can lock out data that is not good for the project knowledge base and does not have a commitment to the project goals. The matrix or display can implement document quality at its intersections of risk and quality should the need arise. The matrix or display can change its processes for different repositories to get different answers in the project pertinent to its mission statement. The matrix or display can subscribe to knowledge relevant to the mission. Process relevant to the mission and Tasks relevant to the mission.

Figure 20

VDX Client Software drives the following devices

- Computers that have a Colour Screen
- Satellite and Mobile Phones
- Interactive Television
- Personal Computers
- Palm Computers
- VDX Processor
- VDX Model Organ digital or physical
- Inputs to Software are Mass, Cost, Scores, Time, Location in the model, Location Geographically, DNA .

Figure 21

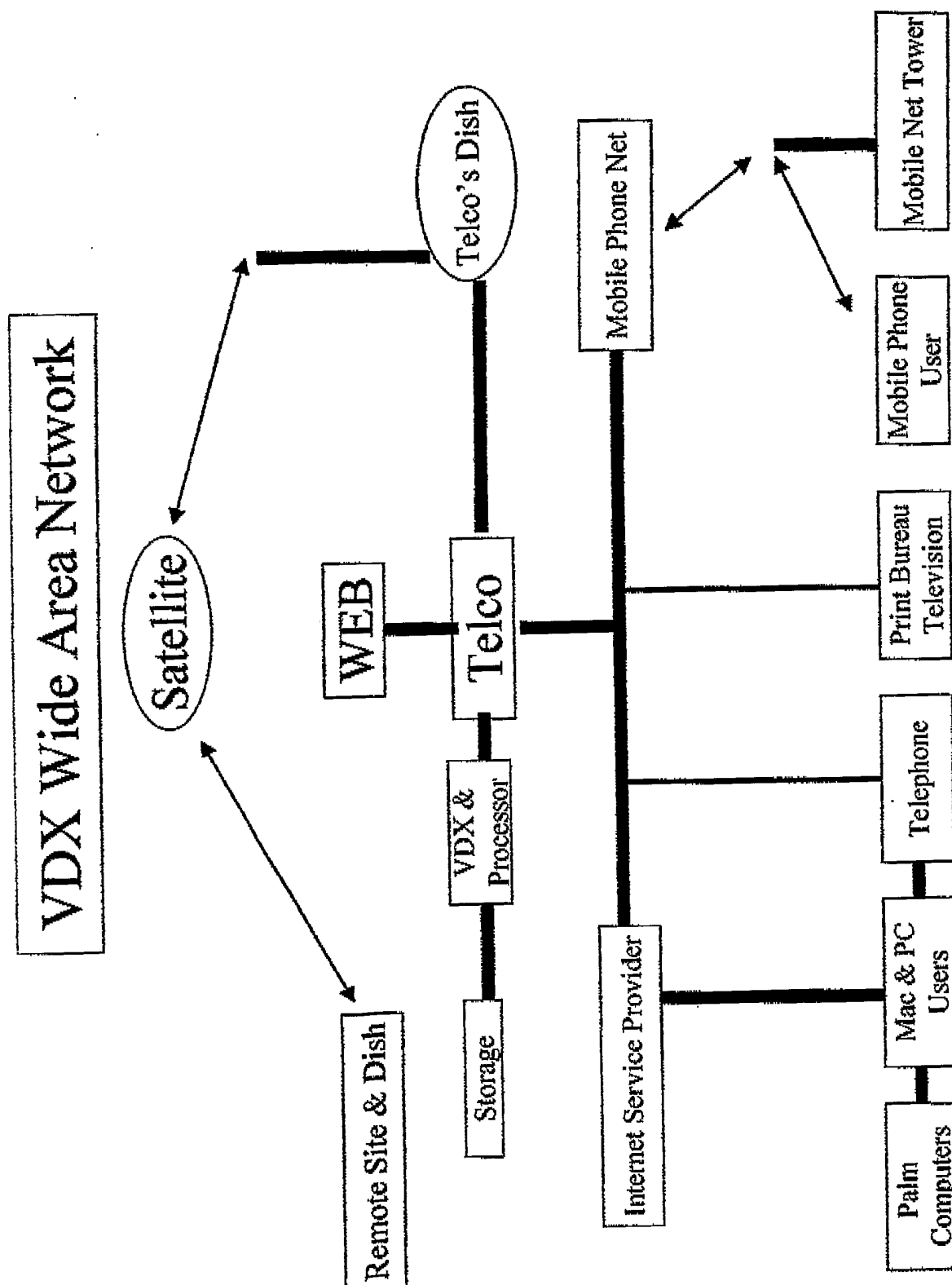


Figure 22

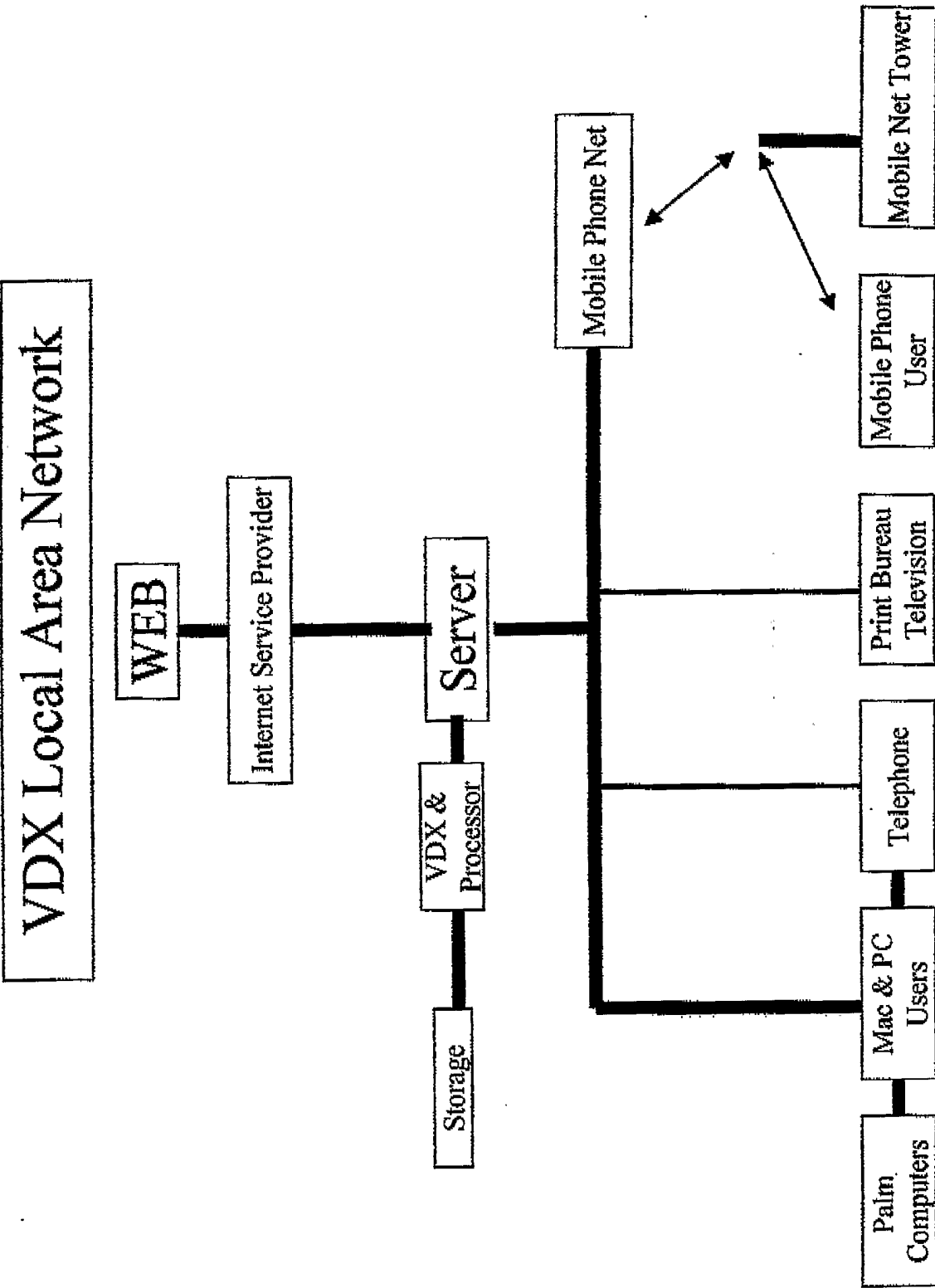


Figure 23

VDX User with Application Service Provider

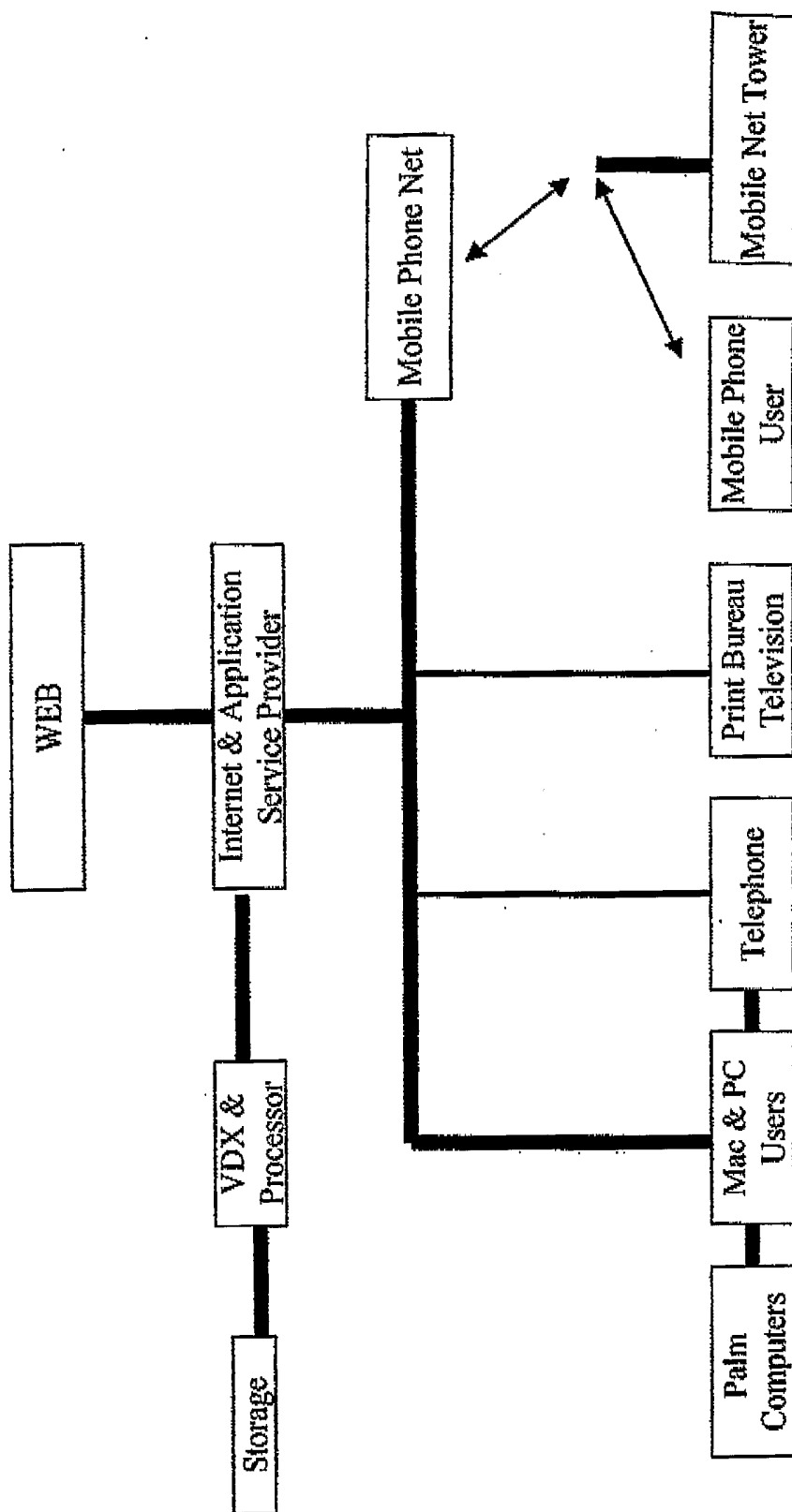


Figure 24

VDX Single User

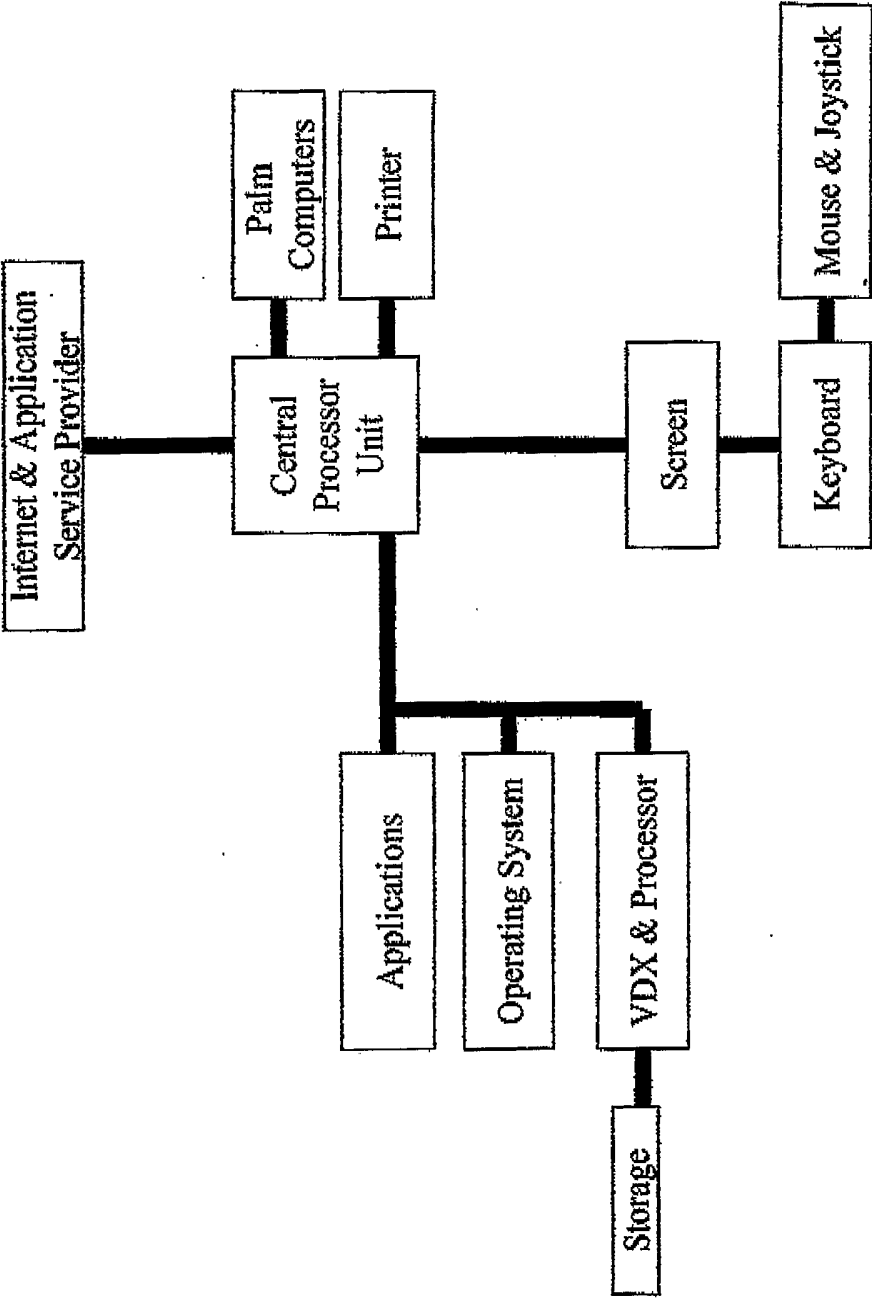


Figure 25

Legend of Model



VDX Client Management Systems		
Legend		
①	Stimulus Repository	⑧ Contract, Law or Rule
②	Human Resources Hub	⑨ Limits Upper & Lower Input & Output
③	Management Repositories	→ ¹⁰ Intersection
⁴ —	Document	→ ¹¹ Send
⁵ —	Communication	
⁶ —	Time	⑬ Applet Tools
	Risk and Quality	⑭ Product Repository

Figure 26

Legend of Model

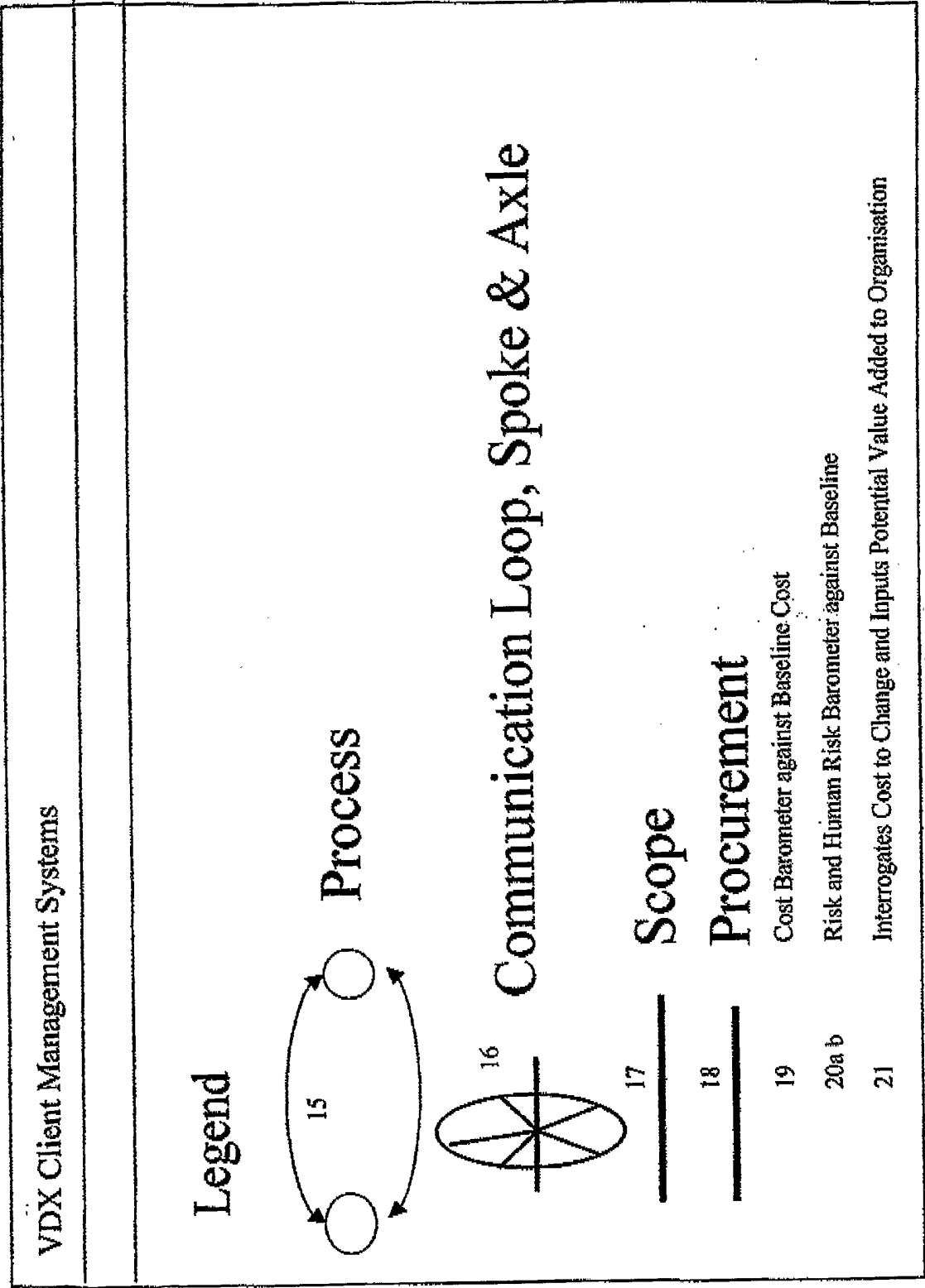


Figure 27

Legend of Model

VDX Client Management Systems	
Legend	
22	Interrogates Point of no Return
23a,b,c,d	Interrogates who is Forming, Storming, Norming, Performing, Mourning
24a,b,c	Project life Cycle Phases
25	Time Scale
26	Tool Storage which can be inserted or Merged into the project as are relevant to the project phase & Stimuli
27	Inbox for project phase
28	Outbox for project phase
29	Interpreter and sketch for model
30	Composes a document type / format that relates to the Origin & Destination and opens the relevant application
31	Files a document via certain attributes into 6 in Chronological order.
32	Communicator sends a composed document from origin to Destination
33	Searcher finds documents in the web, databases or project via the criteria placed in the repositories
34	Organisation Value created by the weighting system

Figure 28

Legend of Model

VDX Client Management Systems	
Legend	
35	Input Point in Time
36	Risk Capital of Weighting Systems and calibration of risk in project
37	Is a ++ Quadrant when ignited opens a Knowledge application
38	Is +- Quadrant when ignited opens up a Reason application
39	Is -- Quadrant when ignited opens up a Process application
40	Is -+ Quadrant when ignited opens up a Task application
41	Repository Value System which is contained in an applet and controlled by Quality Scores and has a Risk rating on the Communication spoke which is used for all components of the Repository.
42	Storage of document links
43	Input Arrows and Out Put Arrows to Sub Components
44	Material Sub Component Stimuli
45	Plant & Equipment Sub Component Stimuli
46	Owner User Sub Component Stimuli
47	Task Quadrant

Figure 29

Legend of Model

VDX Client Management Systems	
Legend	
48	Knowledge Quadrant
49	Processes Quadrant
50	Reasons Quadrant
51	Major Processes
52	Medium Processes
53	Minor Processes
54	Brain storming Data base
55	
56	
57	
58	
59	
60	

Figure 30

Glossary of Terms

2 D	Matrix has length and breadth and can be plotted with XY Axis and Co-Ordinates
3 D	Object has length, depth and breadth it can be plotted with XYZ Axis and Co-ordinates
Algorithms	A process or set of rules used for calculation or problem solving
Applet	Is a small application that has a specific task
Application	Is a software application that is specific to a task or process
Axle	Main Connector in a model which is central to smaller parts
Barcode	Machine readable code in the form of a pattern of stripes printed on and identifying a commodity
Barometer	Any thing that reflects changes and forecasting of results based on trends from data
Baseline	Is the criteria that is used to substantiate a project value at the beginning of the project eg budget time
Calibrate	The act or process of calibrating to determine the correct capacity or value
Connect	The act or process of joining two objects or two mental process
Contents	What is contained in a vessel or repository
Control Point	The power of directing a command and a give co-ordinate
Crossing	Traversing from one co-ordinate to another co-ordinate across an object
Dash Board	The Screen of the computer that is interactive and has objects drive a computer processor
Data Base	Known fact or things used as a basis for Inference or reckoning in a Computer
DNA	Original information that describes a object, device, document, person type, description or address etc
Document	Any type of transmission of data or object
Event	A thing that happens or takes place

Figure 31

Glossary of Terms

Explode	Showing the components of a mechanism as if separated by an explosion but in the normal relative positions
External Forces	are the issues or risks that affect the smooth running of an Organisation
Fence	A barrier or curtain that surrounds and object so it may be ignited
Flag	Is a Label of an object that is always blown across the screen and is stored in a database with many attributes that are used to assist in the organizing projects in a repository
Hub	A central part from which spokes radiate
Ignite	Provoke or excite an object in the display that then opens the component or object to further display files or shapes
In Put	What is put in or taken in or operated on by any process or system
Intersection	A place where two or more data points meet
Laws	The controlling influence of an action or procedure
Limits	A point, line or level beyond which something does not or may not extend or pass
Link	Connect or Join
Location	A co-ordinate in a 3 dimensional space which is represented by x,y,z
Lock	A mechanism for securing an object
Loop	Connection of repositories which have different objects to create a process or object
Mass	Assemble in to a mass that creates one body
Master	Master tells you what to do and provides the way to do it. Hence this software acts as a Master not a Slave
Matrix	the display in figure 1 or model in Figure 1 or Display in Figure 1
Means	That by which a result is brought about

Figure 32

Glossary of Terms

Modeler	A person and device that is able to be manipulate components to produce a design or structure of an object
Modem	Device that modulates and demodulates between two devices
Node	Applet that processes laws and rules in a communications network
Milestone	Is an important point in time in an organizations history which is displayed by different human resource hubs
Output	the product of a process
Parameters	Specification and limits of an act
Process	is a chronological act of events or task eg plan do check act
Position	a co-ordinate in a 3 dimensional space represented by x,y,z axis
Publish	To build and communicate to more than one person
Repository	A vessel to Hold and store data, process, task etc
Resources	This means money, Labour, plant material etc
Risk	this is an input into the software which defines a limit on an event as it applies to time
Rules	A principle to which an action conforms or is required to conform
Scale	A ratio of size in a model
Score	Running account of marks against a person or object in the model
Slave	The user of the software is a slave as the software is the master. The software tells you what to do you do not tell it.
Space	A Continuous unlimited area or expanse which may or may not contain objects
Spoke	A object that radiates from a hum to an outer rim or loop

Figure 33

Glossary of Terms

Stimuli	This term is used when a document or communication is transferred to a person this being a stimulus to act.
Squawk	means the display vacillates, quickly displaying a flashing object with a sound if required
Squelch	is a means of reducing time in all calculations in the software which then changes trends and makes the historical trend collide with the current trend hence making the display squawk.
Taxonomies	Categories of information in an Organisation
VDX	Virtual Document Exchange is the software name that enables the computer to display the files
Weight	Statistic multiplied by a component of an average by factors to take account of there importance's
Window	To highlight an object for calculation or manipulation
Zoom	Close up rapidly from a long shot to a close up

Figure 34

INTERNATIONAL SEARCH REPORT

International application No.

PCT/AU03/00913

A. CLASSIFICATION OF SUBJECT MATTERInt. Cl. ⁷: G06F 17/60

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

WPAT (Business, model, display)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 02/26014 A2 (Reservoirteam Limited) 4 April 2002 Whole Document	1-16
X	WO 01/61456 A2 (Geopheonix, Inc) 23 August 2001 Whole Document	1-16
X	WO 00/58874 A1 (Octane Software, Inc) 5 October 2000 Whole Document	1-16



Further documents are listed in the continuation of Box C



See patent family annex

* Special categories of cited documents:	
"A" document defining the general state of the art which is not considered to be of particular relevance	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"E" earlier application or patent but published on or after the international filing date	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"O" document referring to an oral disclosure, use, exhibition or other means	"&" document member of the same patent family
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search
12 August 2003

Date of mailing of the international search report

15 AUG 2003

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.

PCT/AU03/00913

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report			Patent Family Member		
WO	2002/26014	GB	2369460	AU	9011001
WO	2001/61456	AU	3827401	AU	3831101
		CA	2400330	EP	1256046
WO	2000/58874	AU	4028000		
					END OF ANNEX