MULTIDIMENSIONAL RISK ANALYSIS SYSTEMS

BACKGROUND

This invention relates to providing a system for improved risk assessment in market trading. More particularly, this invention relates to providing a system for risk assessment from multiple independent risk factors across multiple time frames.

In trading any market vehicle, over a period of time, technicians and economists seek to identify risks as early as possible. However, early pin-point detection, optimal sequencing, categorization, and confirmation of the risks are difficult in real-time (as they happen); this leads to delayed entry and exit in market trades. Further, *multiple* confirmations of risks delay entries and exits in market trades even longer.

A system is needed to identify and confirm risks in real-time, as the risks develop. Further, a system is needed that will identify and confirm risks in user-desired time frames and at any stage of a trend.

OBJECTS AND FEATURES OF THE INVENTION

A primary object and feature of the present invention is to provide a system overcoming the above-mentioned problems and needs.

It is a further object and feature of the present invention to provide such a system that provides assessment of the multiple risks, inherent in market trading.

Another object and feature of the present invention is to provide such a system that confirms risks in multiple time frames.

A further primary object and feature of the present invention is to provide such a system that is efficient, inexpensive, and handy. Other objects and features of this invention will become apparent with reference to the following descriptions.

SUMMARY OF THE INVENTION

In accordance with a preferred embodiment hereof, this invention provides a computer method, relating to real-time market analysis, comprising the steps of: processing, by at least one computer, at least one real-time market feed to determine real-time market data; automatically

calculating, by such at least one computer, current values of each of a plurality of market risk factors from such real-time market data; real-time analyzing, by such at least one computer, at least one combination of such market risk factors to quantify at least one market risk; assessing relevance, by such at least one computer, of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and displaying, by such at least one computer, such at least one risk indicator. Moreover, it provides such a computer method further comprising the step of displaying, by such at least one computer, at least some of such current values of such plurality of market risk factors. Additionally, it provides such a computer method further comprising the step of calculating, by such at least one computer, each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time.

Also, it provides such a computer method further comprising the step of displaying, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors, by such at least one computer. In addition, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one historic value range boundary risk factor. And, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one time-duration risk factor. Further, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one trend health risk factor.

Even further, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one price-perception risk factor. Moreover, it provides such a computer method wherein such step of automatically, by such at least one computer, calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one internal-market-movement risk factor. Additionally, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of

market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one economic-event risk factor.

Also, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating, by such at least one computer, current values of at least one multiple condition risk factor. In addition, it provides such a computer method wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises at least two of the following steps: automatically calculating, by such at least one computer, current values of at least one historic value range boundary risk factor; automatically calculating, by such at least one computer, current values of at least one time-duration risk factor; automatically calculating, by such at least one computer, current values of at least one trend health risk factor; price-perception computer risk processor means for automatically calculating, by such at least one computer, current values of at least one price-perception risk factor; automatically calculating, by such at least one computer, current values of at least one internal-market-movement risk factor; automatically calculating, by such at least one computer, current values of at least one economic-event risk factor; and automatically calculating, by such at least one computer, current values of at least one multiple condition risk factor.

In accordance with another preferred embodiment hereof, this invention provides a computer system, relating to real-time market analysis, comprising: at least one market feed computer processor structured and arranged to process at least one real-time market feed to determine real-time market data; at least one risk factor computer processor structured and arranged to automatically calculate current values of each of a plurality of market risk factors from such real-time market data; at least one analysis computer processor structured and arranged to real-time analyze at least one combination of such market risk factors to quantify at least one market risk; at least one risk assessing computer processor structured and arranged to assess relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and at least one risk indicator computer display structured and arranged to display such at least one risk indicator.

And, it provides such a computer system further comprising at least one risk factor computer display structured and arranged to display at least some of such current values of such plurality of market risk factors. Further, it provides such a computer system further comprising at least one time-frame computer processor structured and arranged to calculate each of such plurality of market risk factors relating to each of a plurality of time frames ending at about

current real-time. Even further, it provides such a computer system further comprising at least one time-frame computer display structured and arranged to display, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors. Moreover, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one bounded range risk computer processor structured and arranged to automatically calculate current values of at least one historic value range boundary risk factor.

Additionally, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one historic value range boundary risk factor to determine when to display at least one historic value range boundary risk indicator. Also, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one time-duration risk computer processor structured and arranged to automatically calculate current values of at least one time-duration risk factor. In addition, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one time-duration risk factor to determine when to display at least one historic value range boundary risk indicator. And, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one trend health risk computer processor structured and arranged to automatically calculate current values of at least one trend health risk factor. Further, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one trend health risk factor to determine when to display at least one trend health risk indicator. Even further, it provides such a computer system wherein such at least one risk factor computer display comprises at least one summation of at least one count of positively showing of such plurality of market risk factors and at least one negative count of negatively showing of such plurality of market risk factors.

Moreover, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one price-perception risk computer processor structured and arranged to automatically calculate current values of at least one price-perception risk factor. Additionally, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one price-perception risk factor to determine when to display at least one price-perception risk indicator. Also, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one internal-market-movement risk computer processor structured

and arranged to automatically calculate current values of at least one internal-market-movement risk factor. In addition, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of at least one internal-market-movement risk factor to determine when to display such at least one internal-market-movement risk indicator.

And, it provides such a computer system wherein such at least one risk factor computer processor comprises economic-event risk computer processor structured and arranged to automatically calculate current values of at least one economic-event risk factor. Further, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one economic-event risk factor to determine when to display at least one economic-event risk indicator. Even further, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one multiple-conditions risk computer processor structured and arranged to automatically calculate current values of at least one multiple condition risk factor. Moreover, it provides such a computer system wherein such at least one analysis computer processor analyzes at least one combination of such current values of such at least one multiple-conditions risk factor to determine when to display at least one multiple-conditions risk indicator.

Additionally, it provides such a computer system wherein such at least one risk factor computer processor comprises at least two of the following: at least one bounded range risk computer processor structured and arranged to automatically calculate current values of at least one historic value range boundary risk factor; at least one time-duration risk computer processor structured and arranged to automatically calculate current values of at least one time-duration risk factor; at least one trend health risk computer processor structured and arranged to automatically calculate current values of at least one trend health risk factor; at least one price-perception computer risk processor structured and arranged to automatically calculate current values of at least one price-perception risk factor; at least one internal-market-movement risk computer processor structured and arranged to automatically calculate current values of at least one internal-market-movement risk factor; at least one economic-event risk computer processor structured and arranged to automatically calculate current values of at least one economic-event risk factor; and at least one multiple-conditions risk computer processor structured and arranged to automatically calculate current values of at least one multiple condition risk factor.

In accordance with another preferred embodiment hereof, this invention provides a computer system, relating to real-time market analysis, comprising: market feed computer processor means for processing at least one real-time market feed to determine real-time market

data; risk factor computer processor means for automatically calculating current values of each of a plurality of market risk factors from such real-time market data; analysis computer processor means for real-time analyzing at least one combination of such market risk factors to quantify at least one market risk; risk assessing computer processor means for assessing relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and risk indicator computer display means for displaying such at least one risk indicator.

Also, it provides such a computer system further comprising risk factor computer display means for displaying at least some of such current values of such plurality of market risk factors. In addition, it provides such a computer system further comprising time-frame computer processor means for calculating each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time. And, it provides such a computer system further comprising time-frame computer display means for displaying, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors. Further, it provides such a computer system wherein such risk factor computer processor means comprises bounded range risk computer processor means for automatically calculating current values of at least one historic value range boundary risk factor.

Even further, it provides such a computer system wherein such risk factor computer processor means comprises time-duration risk computer processor means for automatically calculating current values of at least one time-duration risk factor. Even further, it provides such a computer system wherein such risk factor computer processor means comprises trend health risk computer processor means for automatically calculating current values of at least one trend health risk factor. Even further, it provides such a computer system wherein such risk factor computer processor means comprises price-perception computer risk processor means for automatically calculating current values of at least one price-perception risk factor. Even further, it provides such a computer system wherein such risk factor computer processor means comprises internal-market-movement risk computer processor means for automatically calculating current values of at least one internal-market-movement risk factor. Even further, it provides such a computer system wherein such risk factor computer processor means comprises economic-event risk computer processor means for automatically calculating current values of at least one economic-event risk factor.

Even further, it provides such a computer system wherein such risk factor computer processor means comprises multiple-conditions risk computer processor means for automatically calculating current values of at least one multiple condition risk factor. Even further, it provides

such a computer system wherein such risk factor computer processor means comprises at least two of the following: bounded range risk computer processor means for automatically calculating current values of at least one historic value range boundary risk factor; time-duration risk computer processor means for automatically calculating current values of at least one time-duration risk factor; trend health risk computer processor means for automatically calculating current values of at least one trend health risk factor; price-perception computer risk processor means for automatically calculating current values of at least one price-perception risk factor; internal-market-movement risk computer processor means for automatically calculating current values of at least one internal-market-movement risk factor; economic-event risk computer processor means for automatically calculating current values of at least one economic-event risk factor; and multiple-conditions risk computer processor means for automatically calculating current values of at least one multiple condition risk factor.

In accordance with another preferred embodiment hereof, this invention provides a computer system, relating to real-time market analysis, comprising: market feed computer processing means for processing at least one real-time market feed to determine real-time market data; multiple time frame computer interface means for assisting user selection of multiple time frames ending at about current real-time; risk assessing computer processor means for assessing risk with respect to each of multiple market turnaround risk factors; analysis computer processor means for real-time analyzing a combination of such multiple market turnaround risk factors with respect to such real-time market data; risk factor computer processor means for automatically determining each of such multiple market turnaround risk factors; risk factor computer interface means for displaying each such determining of such multiple market turnaround risk factors; wherein such risk factor computer interface means comprises time-frame computer interface means for displaying, for each such user-selected time-frame, each such market turnaround risk factors.

Moreover, it provides such a computer system wherein such risk factor computer processor means comprises bounded range risk computer processor means for automatically determining at least one historic value range boundary risk factor. Additionally, it provides such a computer system wherein such risk factor computer processor means comprises time-duration risk computer processor means for automatically determining at least one time-duration risk factor. Also, it provides such a computer system wherein such risk factor computer processor means comprises trend health risk computer processor means for automatically determining at least one trend health risk factor. In addition, it provides such a computer system wherein such risk factor computer processor means comprises price-perception computer risk processor means

for automatically determining at least one price-perception risk factor. And, it provides such a computer system wherein such risk factor computer processor means comprises internal-market-movement risk computer processor means for automatically determining at least one internal-market-movement risk factor. Further, it provides such a computer system wherein such risk factor computer processor means comprises economic-event risk computer processor means for automatically determining at least one economic-event risk factor. Even further, it provides such a computer system wherein such risk factor computer processor means comprises multiple-conditions risk computer processor means for automatically determining at least one multiple condition risk factor.

Moreover, it provides such a computer system wherein such risk factor computer processor means comprises at least two of the following: bounded range risk computer processor means for automatically determining at least one historic value range boundary risk factor; time-duration risk computer processor means for automatically determining at least one time-duration risk factor; trend health risk computer processor means for automatically determining at least one trend health risk factor; price-perception computer risk processor means for automatically determining at least one price-perception risk factor; internal-market-movement risk computer processor means for automatically determining at least one internal-market-movement risk factor; economic-event risk computer processor means for automatically determining at least one economic-event risk factor; and multiple-conditions risk computer processor means for automatically determining at least one multiple condition risk factor. In accordance with another preferred embodiment hereof, this invention provides a computer system, relating to real-time market analysis, comprising: at least one market feed computer processor structured and arranged to process at least one real-time market feed to determine real-time market data; at least one multiple time frame computer interface structured and arranged to assist user selection of multiple time frames ending at about current real-time; at least one risk assessing computer processor structured and arranged to assess risk with respect to each of multiple market turnaround risk factors; at least one analysis computer processor structured and arranged to real-time analyze a combination of such multiple market turnaround risk factors with respect to such real-time market data; at least one risk factor computer processor structured and arranged to automatically determine each of such multiple market turnaround risk factors; at least one risk factor computer interface structured and arranged to display each such determining of such multiple market turnaround risk factors; wherein such at least one risk factor computer interface comprises at least one time-frame computer interface structured and arranged to display, in each such user-selected time-frame, each such market turnaround risk factors. Additionally, it

provides such a computer system wherein such at least one risk factor computer processor comprises at least one bounded range risk computer processor structured and arranged to automatically determine at least one historic value range boundary risk factor.

Also, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one time-duration risk computer processor structured and arranged to automatically determine at least one time-duration risk factor. In addition, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one trend health risk computer processor structured and arranged to automatically determine at least one trend health risk factor. And, it provides such a computer system wherein such at least one risk factor computer interface displays at least one summation of at least one count of positively showing of such multiple market turnaround risk factors and at least one negative count of negatively showing of such multiple market turnaround risk factors. Further, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one price-perception computer risk processor structured and arranged to automatically determine at least one price-perception risk factor.

Even further, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one internal-market-movement risk computer processor structured and arranged to automatically determine at least one internal-market-movement risk factor. Even further, it provides such a computer system wherein such at least one risk factor computer processor comprises economic-event risk computer processor structured and arranged to automatically determine at least one economic-event risk factor. Even further, it provides such a computer system wherein such at least one risk factor computer processor comprises at least one multiple-conditions risk computer processor structured and arranged to automatically determine at least one multiple condition risk factor.

Even further, it provides such a computer system wherein such at least one risk factor computer processor comprises at least two of the following: at least one bounded range risk computer processor structured and arranged to automatically determine at least one historic value range boundary risk factor; at least one time-duration risk computer processor structured and arranged to automatically determine at least one time-duration risk factor; at least one trend health risk computer processor structured and arranged to automatically determine at least one trend health risk factor; at least one price-perception computer risk processor structured and arranged to automatically determine at least one price-perception risk factor; at least one internal-market-movement risk computer processor structured and arranged to automatically determine at least one internal-market-movement risk factor; at least one economic-event risk

computer processor structured and arranged to automatically determine at least one economic-event risk factor; and at least one multiple-conditions risk computer processor structured and arranged to automatically determine at least one multiple condition risk factor. In accordance with another preferred embodiment hereof, this invention provides for each and every novel feature, element, combination, step and/or method disclosed or suggested by this patent application.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 shows a schematic view, illustrating a multidimensional risk analysis system, according to a preferred embodiment of the present invention.

FIG. 2 shows a screenshot view, illustrating vertical risk dimensions, according to the preferred embodiment of FIG. 1.

FIG. 3 shows a screenshot view, illustrating horizontal time risk dimensions, according to the preferred embodiment of FIG. 1.

FIG. 4 shows a screenshot view, illustrating health risk dimension components, according to the preferred embodiment of FIG. 1.

FIG. 5 shows a screenshot view, illustrating price perception indicators, according to the preferred embodiment of FIG. 1.

FIG. 6 shows a screenshot view, illustrating internal movement indicators, according to the preferred embodiment of FIG. 1.

DETAILED DESCRIPTION OF THE BEST MODES AND PREFERRED EMBODIMENTS OF THE INVENTION

FIG. 1 shows a schematic view, illustrating a multidimensional risk analysis system **100**, according to a preferred embodiment of the present invention. Multidimensional risk analysis system **100** shows an internet method for obtaining market data **137**. Multidimensional risk analysis system **100** preferably comprises at least one market-data processing center **105** preferably comprising at least one market-feed database server **190**. Market-feed database server **190** preferably comprises at least one market-feed database **195**. Market-feed database server **190** preferably receives at least one market data feed **135**, from at least one market feed provider **130**, preferably by communicating with at least one market feed server **132**. Market data feed **135** preferably comprises market data **137**, relating to trade markets. Market data **137** is preferably stored in market-feed database **195**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as costs, future technologies, etc., other methods of obtaining market data, such as, for example, direct connection, website extraction, etc., may suffice.

Communication between market-feed database server **190** (at least embodying herein at least one market feed computer processor structured and arranged to process at least one real-time market feed to determine real-time market data; and at least embodying herein processing at least one real-time market feed to determine real-time market data) and market feed server **132** preferably is conducted through at least one network **355**, preferably the Internet **350**. At least one firewall **355** preferably secures communication with Internet **350**, preferably to prevent unsanctioned access to market-data processing center **105**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, costs, etc., other communication securing methods, such as, for example, encryption, security gateways, etc., may suffice.

Communication within market-data processing center **105** is preferably handled through at least one communications router **360**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, cost, etc., other communications devices, such as, for example, direct connections, wireless connections, etc., may suffice.

Market-data processing center **105** preferably comprises at least one programmable market data software, preferably Metastock® Pro (available from Equis.com). Market-data processing center **105** preferably further comprises at least one risk processor **200**, preferably at least one risk assessor **140**, preferably at least one risk analyzer **150**, and preferably at least one history database server **180**.

Risk processor **200** (at least embodying herein at least one risk factor computer processor structured and arranged to automatically calculate current values of each of a plurality of market risk factors from such real-time market data; and at least embodying herein automatically calculating current values of each of a plurality of market risk factors from such real-time market data) preferably processes market data **137**, preferably identifying portions of market data **137** related to at least one market risk **205**. In discussing "market risk" herein, applicant is generally referring to the particular risks of performing a particular trade at a particular time. Risk analyzer **150** (at least embodying herein at least one analysis computer processor structured and arranged to real-time analyze at least one combination of such market risk factors to quantify at least one market risk ; and at least embodying herein real-time analyzing at least one combination of such market risk factors to quantify at least one market risk) preferably analyzes the identified portions of market data **137**, preferably identifying risk attributes, preferably direction and severity, of market risk **205**. Risk processor **200** and risk analyzer **150** preferably both operate in real-time (as market data **137** is received by market-feed database server), and

process and analyze, respectively, preferably in multiple time frames **325**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, costs, resources, etc., other risk attribute identifications may suffice.

Risk assessor **140** (at least embodying herein at least one risk assessing computer processor structured and arranged to assess relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and at least embodying herein assessing relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator) preferably creates at least one risk assessment **315**, preferably comprising at least one evaluation of at least one risk factor determining whether at least one level of risk is reached, preferably triggering at least one display of the at least one level of risk, preferably comprising at least one indicator **500** (see FIG. 2 through FIG. 6). Indicator **500** preferably indicates the identified direction and severity of market risk **205**. Risk assessment **315** preferably comprises indicators **500** from multiple market risks **205**, preferably in multiple time-frames **325** (at least embodying herein at least one time-frame computer processor structured and arranged to calculate each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time; and at least embodying herein calculating each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time), preferably ending at about current time. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, costs, etc., other risk assessments, such as, for example, market vehicle interrelationship risks, common industry risks, company relationship risks, etc., may suffice.

History database server **180** preferably comprises at least one history database **185**. History database **185** preferably stores results from risk processor **200** and risk analyzer **150**. Risk assessor **140** preferably accesses history database **185**, preferably to include indicators **500**, referencing market risks **205** previously identified, in risk assessment **315**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, costs, etc., other data history storage, such as, for example, rotating buffers, flat files, period specific reports, etc., may suffice.

Market-data processing center **105** preferably further comprises at least one user server **160**, at least one user database server **170**, and at least one user interface server **300**. At least one user **110** preferably may utilize user server **160**, user database server **170** and user interface server **300** to interact with market-data processing center **105**.

User interface server **300** preferably provides at least one user interface **305** for use by user **110**. User interface **305** preferably comprises at least one risk assessment display **310**, at least one time frame display **320** and at least one display preference interface **330**. Display preference interface **330** preferably allows user **110** to set preferences for display of time frames **325** and risk assessments **315**.

User **110** preferably uses at least one user computer **120**, preferably having at least one client user interface **125**, preferably a web browser, to connect to user interface **305**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as cost, future technologies, etc., other software architectures, such as, for example, client server applications, stand-alone applications, etc., may suffice.

Risk assessment display **310** (at least embodying herein at least one risk indicator computer display structured and arranged to display such at least one risk indicator; and at least embodying herein displaying such at least one risk indicator) and time frame display **320** preferably display risk assessment **315** and time frames **325**, respectively, to user **110**. Risk assessment display 310 (at least embodying herein at least one risk factor computer display structured and arranged to display at least some of such current values of such plurality of market risk factors; and at least embodying herein displaying at least some of such current values of such plurality of market risk factors) preferably also displays at least some of the results from risk processor 200. Risk assessment display **310** and at least one time frame display **320** are preferably combined for comparison by user **110**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future technologies, user preference, costs, etc., other processed data distribution methods, such as, for example, email alerts, outbound data feeds, instant messages, text messages, etc., may suffice.

User server **160** preferably controls authentication to market-data processing center **105** preferably using at least one user account **165**. User **110**, having user account **165**, may login to market-data processing center **105**, using at least one username and password combination, through user server **160**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as cost, future technologies, etc., other authentication methods, such as, for example, key-code, file authenticators, etc., may suffice.

User database server **170** preferably comprises at least one user database **175**. User database **175** preferably stores information for user account **165**, including the preferences set by

user **110** with display preference interface **330**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as costs, future technologies, etc., other data storage methods, such as, for example, flat files, client-side storage, etc., may suffice.

Risk processor **200** preferably comprises at least one internal market moving risk processor **210**, at least one economic event risk processor **220**, at least one multiple conditions risk processor **230**, at least one price perception risk processor **240**, at least one time duration risk processor **250**, at least one trend risk processor **260**, and at least one zone range risk processor **270**. Under appropriate circumstances, Applicant prefers using a combination of at least some of the described risk processors; alternately preferably, each other combination of at least some of the described risk processors. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future market influences, future technologies, available data, etc., other risk processors, such as, for example, non-economic event risk processors, news-feed risk processors, industry-family risk processors, company-family risk processors, etc., may suffice.

In use, multidimensional risk analysis system **100** preferably provides, in risk assessment **315**, a representation of the travel of current market vehicle prices while demonstrating various market risks **205** in a multi-dimensional risk spectrum. Risk assessment **315** also preferably presents multiple confirmations of market risks **205**, preferably in multiple time frames **325**.

Each market risk **205** has preferably no direct dependence on other market risks **205**; while ideally this non-dependence is complete, market risks **205** may have indirect influences on one another. During the movement of any market vehicle, movement of a market vehicle is subject to various risk dimensions (market risks **205**) that the applicant categorizes in seven major dimensions (seven market risks **205**), namely: vertical risk dimension (zone range risk **275**); horizontal time risk (time duration risk **255**); trend health risk **265**; dynamic sectional price risk (price perception risk **245**); sudden market spot change risk (internal market moving risk **215**); Special conditional risk (multiple conditions risk **235**); fundamental risk (economic event risk **225**).

Risk processor **200** preferably independently processes each market risk **205**. Consequently, internal market moving risk processor **210** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one internal-market-movement risk computer processor structured and arranged to automatically calculate current values of at least one internal-market-movement risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises

the step of automatically calculating current values of at least one internal-market-movement risk factor) preferably processes internal market moving risk **215**, economic event risk processor **220** (at least herein embodying wherein said at least one risk factor computer processor comprises economic-event risk computer processor structured and arranged to automatically calculate current values of at least one economic-event risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one economic-event risk factor) preferably processes economic event risk **225**, multiple conditions risk processor **230** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one multiple-conditions risk computer processor structured and arranged to automatically calculate current values of at least one multiple condition risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one multiple condition risk factor) preferably processes multiple conditions risk **235**, price perception risk processor **240** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one price-perception risk computer processor structured and arranged to automatically calculate current values of at least one price-perception risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one price-perception risk factor) preferably processes price perception risk **245**, time duration risk processor **250** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one time-duration risk computer processor structured and arranged to automatically calculate current values of at least one time-duration risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one time-duration risk factor) preferably processes time duration risk **255**, trend risk processor **260** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one trend health risk computer processor structured and arranged to automatically calculate current values of at least one trend health risk factor; and at least herein embodying wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one trend health risk factor) preferably processes trend health risk **265**, and zone range risk processor **270** (at least herein embodying wherein said at least one risk factor computer processor comprises at least one bounded range risk computer processor structured and arranged to

automatically calculate current values of at least one historic value range boundary risk factor; and at least embodying herein wherein such step of automatically calculating current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one historic value range boundary risk factor) preferably processes zone range risk **275**.

FIG. 2 shows a screenshot view, illustrating vertical risk dimensions, according to the preferred embodiment of FIG. 1. In the vertical risk dimension (zone range risk **275**), indicators **500** preferably comprise at least two dynamic zone lines **1005**, preferably at least seven dynamic zone lines **1005**, as shown in FIG. 2. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as cost, market dynamics, future statistical methods, etc., other dynamic zone line quantities, such as, for example, nine, twelve, twenty, etc., may suffice.

Dynamic zone lines **1005** preferably comprise zone line **1010**, zone line **1020**, zone line **1030**, zone line **1040**, zone line **1050**, zone line **1060** and zone line **1070**, preferably determined in a statistical manner, preferably by applying a Fibonacci analysis. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as desired accuracy, future technologies, cost, etc., other quantities of dynamic zone lines may suffice.

Any market vehicle comprises zone range risk **275** preferably comprising an upward or downward movement, when compared to a reference point, over a period of time. Zone range risk **275** preferably moves dynamically as market conditions change and can be divided into multiple zones by dynamic zone lines **1005**, depending upon the accuracy required. Zone range risk **275** preferably is contained between an upper zone line (zone line **1010**) and a lower zone line (zone line **1070**). Zone range risk **275** preferably is dynamically adjusted, preferably when market conditions are going to change.

Zone range risk **275** preferably identifies the risk associated with any market vehicle, by its location between its highest recent position and its lowest position, preferably over designated periods, preferably in a dynamic motion. Zone range risk **275** preferably may be subdivided into seven major dynamic zones lines **1005**, as shown, for recent activities. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as predictive beliefs, cost, etc., other zone lines, such as, for example, higher zone lines, lower zone lines, subdividing zone lines, etc., may suffice. Vertical distances (illustrated by distance **1015**) between any two zone lines **1005** preferably comprise at least one risk zone **1025**.

The dynamic changes on any zone line **1005** preferably indicate possible changes in the near future, which further indicate possible lower prices or higher prices for a market vehicle, depending upon the direction of the change. A key indication is that one of either uppermost zone line (zone line **1010**) or lowermost zone line (zone line **1070**) must be steady and other zone lines vary to higher levels or lower levels compared to previous zone levels. After initial movement of the seven zone lines in one direction, while one of either uppermost or lowermost zone levels remains steady, one of the uppermost or lowermost zone lines will start moving and at one time all seven levels will move in one direction and establish either new higher or new lower prices in the market. In many cases, zone lines **1005** will make a trough formation first, before making such new higher prices or new lower prices compared to previous periods under consideration. The smaller the period selection, the more such events occur.

Traditional factors such as Fib (Fibonacci) levels, pivot levels or combination of both or some specialty levels, possible by mathematic formula, may be used for zone lines **1005**. In other words, the new methodology for Dimension #1 (zone range risk **275**) is preferably flexible and adaptable to existing methods for a smooth transition in future.

Due to dynamic nature of market, these Magic zone levels (zone lines **1005**) or distance **1015** preferably is dynamically adjusted as changes occur, without the traditional limitations of Fib levels or pivot levels. In addition, zone lines **1005** preferably move independent of each other showing true level of risk areas from one to another. It is not necessary to have a constant distance between all zone levels. More zone lines **1005** may preferably be added by changing designated periods, preferably mixing zones **1025** to see earlier changes in market than even a fixed period for all zones **1025**. Additionally, several calculations of zone lines **1005** may preferably be mixed to find an average zone level price, alternately preferably may be combined to derive additional zone lines **1005**. An algorithm may also be used, preferably to bring the values of zone lines **1005** from other time frames **325**, preferably superimposing other zone lines **1005** from other time frames **325**, preferably to create an effect of multiple time frame zone lines for efficient trading.

In use, levels (zone lines **1005**) may be created using higher high values and lower low values over a period of time for any market vehicle and can be interjected with any traditional methods of establishing levels; these interjections can be designated as hybrid zone levels. So, this concept of zones **1025** will eliminate traditional use of Pivots and Fibonacci levels and their limitations in trading. In addition, zone lines **1005** will eliminate the use of two indicators separately and will produce a better dynamic tool for traders. There is a great confusion for traders in selecting, which highs or lows may be selected in applying Fib levels and applicant's

herein described embodiment eliminates that confusion. Applicant's embodiment preferably permits designing zone lines **1005** using different time periods for higher high values and lower low values.

The travel of current prices through these various zone lines or zones along with Applicant's dynamic multi-colored candle collection and various dimensional risks create a multi-dimensional risk spectrum. Further, zone lines **1005** are preferably designed for shorter duration, alternately preferably medium duration, alternately preferably long term duration, alternately preferably super long duration as per choice of user **110**. Separate indicators **500** are preferably designed for each type of choice.

Zone range risk **275** may preferably be represented in real time using the following type of formula:

1-A+ (30)

where 1 is indicating that the current prices (either open, close, high, low - user choice) are above zone line A (zone line **1010**). The plus sign, as shown in formula, shows above zone line prices. A minus sign, in place of the shown plus sign, shows below zone line prices. The (30) indicates a distance of 30 points to the next zone line. For bullish entry, the risk is substantial; the next zone level A is 30 points away from current price.

FIG. 3 shows a screenshot view, illustrating horizontal time risk dimensions, according to the preferred embodiment of FIG. 1. In the horizontal time risk dimension (time duration risk **255**), indicators **500** preferably comprise at least one time spectrum ribbon **1110**. Time spectrum ribbon **1110** preferably comprises at least one time spectrum segment **1115**, preferably at least one bullish time spectrum segment **1130**, alternately preferably at least one bearish time spectrum segment **1140**, alternately preferably at least one neutral time spectrum segment **1150**, as shown. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as user preference, cost, etc., other time spectrum segments, such as, for example, partial bull time spectrum segments, partial bear time spectrum segments, etc., may suffice.

In trading, user **110** needs to find an exact location and a time spectrum (indicated through time spectrum segment **1115**), in any time frame **325**, in real time, where there is a maximum possibility of either bullish stepping desire or bearish stepping desire and there is a mix of desire for bullish or bearish stepping or no stepping desire. There is a horizontal time risk dimension (time duration risk **255**) associated in trading during the formation of a time spectrum, preferably with indicators **500** comprising bullish time spectrum segment **1130**, bearish time spectrum segment **1140** and neutral time spectrum segment **1150**, preferably indicating bullish

desire, bearish desire, or mix of desire for bullish or bearish situations, respectively. The longer the time spectrum segment forms, the greater the risk for any type of desire.

Time duration risk **255** preferably is represented by multiple time spectrum ribbons **1110**. At least one fixed time spectrum ribbon **1170** preferably represents time duration risk **255** of a time frame **325**, currently displayed. Additionally, at least one floating time spectrum ribbon **1160** is preferably used to represent at least one hybrid of time duration risk from other time frames **325** (at least embodying herein at least one time-frame computer display structured and arranged to display, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors; and at least embodying herein displaying, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors), alternately preferably from previous time frames **325**.

Fixed time spectrum ribbon **1170** preferably comprises at least one time risk line **1120**. Each time risk line **1120** preferably comprises a time risk bullish line **1122**, alternately preferably a time risk bearish line **1124**, alternately preferably a time risk neutral line **1126**, or alternately preferably a time risk hybrid line **1228**. Time risk line **1120** preferably comprises at least one indicator color (not shown) for distinguishing between time risk bullish line **1122**, time risk bearish line **1124**, time risk neutral line **1126**, and time risk hybrid line **1228**.

For a bullish horizontal time risk, time risk bullish line **1122** comprises a vertical line preferably drawn before the beginning of a bullish horizontal time risk actual time frame either candle or bar, as shown. Time risk bullish line **1122** is preferably always followed by either bearish time spectrum segment **1140** or neutral time spectrum segment **1150**.

For a bearish horizontal time risk, time risk bearish line **1124** comprises a vertical line preferably drawn before the beginning of a bearish horizontal time risk actual time frame either candle or bar, as shown. Time risk bearish line **1124** is always followed by either bullish time spectrum segment **1130** or neutral time spectrum segment **1150**.

For a neutral horizontal time risk, time risk neutral line **1126** comprises a vertical line preferably drawn before the beginning of a Neutral Horizontal Time risk actual time frame either candle or bar, as shown. Time risk neutral line **1126** is always followed by either bullish time spectrum segment **1130** or bearish time spectrum segment **1140**.

Time risk hybrid line **1228** preferably comprises a vertical line drawn thru a candle or a bar, when a sudden event occurs in the market, due to dimension risk #5 (internal market moving risk **215**), in floating time spectrum ribbon **1160**, as shown.

Indicators **500** for time duration risk **255** preferably pinpoint at least one location, when real increasing bullish stepping desire, real increasing bearish stepping desire or mix stepping or

no stepping desires exist in the market, along with multiple confirmations represented by colored candles or bars representations.

An algorithm is preferably be created using confirmed swing locations in either direction in trading, comparing higher stepping desire values with previous higher stepping desire values, comparing lower stepping desire values with previous stepping lower desire values, the number of bars since these events have occurred, the highest values of stepping swings, and the lowest values of stepping swings. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as cost, user preference, etc., other indicators, such as, for example, PSSTOCH, moving averages, lag-less averages, directional indicators, money flow, CCI, etc., may be injected.

Time duration risk **255** is preferably represented in real time using the following type of formula:

2- Htr(1) [5]

where 2 is indicating that the current prices (either open, close, high, low - according to user choice) are in a bullish horizontal risk. [5] indicates, the bullish horizontal risk is five time frames old.

FIG. 4 shows a screenshot view, illustrating health risk dimension components, according to the preferred embodiment of FIG. 1. Trend health risk **265** preferably uses indicators **500**, preferably comprising at least one oscillating risk indicator **1210**, preferably representing a dynamic oscillating risk assessment of a trend movement of upward, downward or sideways in trading of any market vehicle. Oscillating risk indicator **1210**, within a preferably created, preferably adjustable boundary (boundary lines **1220**) preferably locates a risk tolerance at any given time, in any time frame **325** for any market vehicles. This concept allows checking health of risk in the market on a variable adjustable scale.

Oscillating risk indicator **1210** preferably comprises at least two boundary lines **1220**, preferably at least eleven boundary lines **1220**. Oscillating risk indicator **1210** preferably further comprises at least one oscillating risk indicator component **1215**, preferably at least five oscillating risk indicator components **1215**. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as user preference, cost, desired accuracy, etc., other quantities of boundary lines may suffice.

Boundary lines **1220** preferably comprise an uppermost boundary line **1230**, a lowermost boundary line **1240** and core boundary lines **1250** of the Dynamic Oscillating Risk. The values vary, depending upon the risk associated with a particular market vehicle. Usually, the

approximate values observed are between -7 to + 7 for boundary lines **1220** for various types of Market vehicles. Boundary lines **1220** preferably define at least one risk area **1225**.

The values of boundary lines **1220** from + 6 and exceeding +6 preferably represent uppermost risk areas for bullish believers and lowermost risk areas for bearish believers (risk areas **1260**), when any of five health risk indicator components **1215** are taken into consideration individually or combined. The values of boundary lines **1220** from -6 and less than -6 preferably represent uppermost risk areas for bearish believers and lowermost risk areas for bullish believers (risk areas **1270**). Oscillating risk indicator **1210** in risk areas **1260** preferably indicates a near peak risk for bullish believers and entry points for bearish believers. Likewise, oscillating risk indicator **1210** in risk areas **1270** preferably indicates a near trough risk for bearish believers and entry points for bullish believers.

Oscillating risk indicator **1210** preferably may be displayed for multiple time frames **325**, preferably in real time. Boundary line **1220** values preferably vary depending upon market conditions, type of market vehicle, and preferably may be plotted on vertical scale in a horizontal line format, as shown.

Health risk indicator component **1215** preferably comprises at least one positive/negative-indicator count **1280**. Positive/negative-indicator count **1280** preferably comprises a non-zero integer value. Positive/negative-indicator count **1280** preferably comprises at least one summation of counts of positive and/or negative indicators. Such positive and/or negative indicators preferably include traditional indicators, alternately preferably modified indicators, alternately preferably specialty indicators, alternately preferably proprietary indicators. Each indicator increases count of positive/negative-indicator count **1280** by one, when positive, or decreases count of positive/negative-indicator count **1280** by one, when negative. Count of positive/negative-indicator count **1280** preferably comprises a maximum value equal to the number of indicators used and a minimum value equal to the number of indicators used in the negative. When positive/negative-indicator count **1280** drops below zero, it is considered that the health risk for a bullish direction is very high. When positive/negative-indicator count **1280** has a value equal to the minimum, it is considered that the market vehicle health risk for a bearish outlook is very good. Likewise, once positive/negative-indicator count **1280** increases above zero value, it is considered that the health risk is very high for a bearish outlook for a market vehicle. Also, when positive/negative-indicator count **1280** has a value equal to the maximum, it is considered that the market vehicle health risk for a bullish outlook is very good.

Another health risk indicator component **1215** preferably comprises at least one extreme risk indicator **1282**. Extreme risk indicator **1282** is preferably designed to oscillate between the maximum and minimum polarity values indicated in positive/negative-indicator count **1280**. Extreme risk indicator **1282** preferably comprises at least one algorithm written based on a set of traditional indicator methods, but derived from same family of indicators in positive/negative-indicator count **1280**. In normal market conditions, the value of extreme risk indicator **1282** varies between about 3.5 and about -3.5. Any values greater than about 3.5, up to the maximum, indicate an extreme health risk issue for bullish entries, indicating possible reversals from a bullish to a bearish direction or profit takings. Any values less than about -3.5, down to the minimum, indicate an extreme health risk issue for bearish entries, indicating possible reversals from a bearish to a bullish direction or profit takings.

Yet another health risk indicator component **1215** preferably comprises at least one strength risk indicator **1284**. User **110** may preferably select the number of indicators, preferably comprising traditional indicators, alternately preferably proprietary indicators, alternately preferably custom indicators, as desired. User **110** may additionally preferably select the polarity, and modify such selected indicators for time delays errors. Further, strength risk indicator **1284** may preferably be customized to oscillate between and beyond a boundary, alternately preferably between boundaries to preferably measure the underlying strength. An extreme value of beyond or equal to about -6, using at least four indicators, preferably indicates possible extreme risk for bullish earlier entries and preferably indicates very high risk health for bearish believers. An extreme value of beyond or equal to about 6, using at least four indicators, may preferably indicates possible extreme risk for bearish earlier entries and preferably indicates very high risk health for bullish believers.

A further health risk indicator component **1215** preferably comprises at least one dynamic strength risk indicator **1286**. Dynamic strength risk indicator **1286** preferably is designed similar to strength risk indicator **1284**, however preferably from a selection of various dynamic values, which preferably allows dynamic strength risk indicator **1286** to function independent of strength risk indicator **1284**. The independency preferably helps to avoid further lag errors in traditional or custom indictors used, as well as, earlier or later travel to extreme oscillating risk boundaries. Values of dynamic strength risk indicator **1286** preferably vary between about +7 and about -7, but may also vary from market vehicle to market vehicle depending upon behavioral patterns at the time of its life span.

Another health risk indicator component **1215** preferably comprises at least one internal health risk indicator **1288**. Values of internal health risk indicator **1288** preferably vary between

about +1 and about -1. If values of internal health risk indicator **1288** are about +1 and stays about +1, it preferably is an indication of a health risk that is likely to stay bullish. If values of internal health risk indicator **1288** fall from about +1 and stays below zero and reach to about -1 and then stays at a steady value of about -1, then values of internal health risk indicator **1288** are weak and preferably indicates the health risk for bullish believer has deteriorated and is confirmed. Likewise, if values of internal health risk indicator **1288** are about -1 and stays about -1, it preferably is an indication of a health risk that is likely to stay bearish. If values of internal health risk indicator **1288** rise from about -1 and stays above zero and reach to about +1 and then stays at a steady value of about +1, then values of internal health risk indicator **1288** are strong and preferably indicates the health risk for bearish believer has deteriorated and is confirmed. Internal health risk indicator **1288** may preferably be designed based on stepping desire values mixed with three different types of trend calculations.

Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as market vehicle, cost, etc., other health risk indicator components may suffice.

Health risk indicator components **1215** preferably have an inherent nature of synchronization with each other either preferably partially or, alternately preferably fully, when desired and adjusted by user **110**. Strength risk indicator **1284** and dynamic strength risk indicator **1286**, when synchronized and staying twisted together in upward direction, preferably indicate a strong possibility of continuity of upward trend. In addition, when extreme risk indicator **1282**, strength risk indicator **1284** and dynamic strength risk indicator **1286** are synchronized together in an upward direction, it preferably indicates an even stronger upward strength possibility for bullish belief, until extreme risk indicator **1282** reaches a maximum. The relation of extreme risk indicator **1282**, strength risk indicator **1284** and dynamic strength risk indicator **1286** for bearish belief exactly mirror bullish belief, as stated earlier. Once the polarity of positive/negative-indicator count **1280** and internal health risk indicator **1288** are equal, synchronization preferably occurs. If the polarity is positive for positive/negative-indicator count **1280** and internal health risk indicator **1288**, then it preferably indicates a smooth strong bullish flow for believers. If the polarity is negative for positive/negative-indicator count **1280** and internal health risk indicator **1288**, then it indicates a smooth strong bearish flow for believers.

Trend health risk **265** may preferably be represented in real time using the following type of formula:

3 - # (1), MHRIC - 4 (3.5)

where 3 is indicating that the current prices (either open, close, high, low - user choice) are in trend health risk **265**. #(1) Indicates that the values of boundary lines **1220** fall between about +6 and about - 6, a lowest oscillating risk bullish boundary level near trough, and MHRIC - 4 (3.5) indicates that the value of MHRIC Component four (dynamic strength risk indicator **1286**) is 3.5.

FIG. 5 shows a screenshot view, illustrating price perception indicators **510**, according to the preferred embodiment of FIG. 1. Price perception risk **245** preferably comprises a perception of prices of a market vehicle. Price perception risk **245** preferably uses price perception indicators **510**.

In price perception risk **245**, the perception of prices in the market may preferably be categorized into at least one sectional category of risk, preferably at least six sectional categories of risk, attributed to Bullish, Bearish and/or mixed prices, preferably using at least one analysis tool **1320** comprising algorithms, alternately preferably indicators either custom or traditional, or alternately preferably oscillators, preferably where the primary factors are either open, low, high or close prices in the dynamic motion against time. Price perception risk **245** preferably is directly proportional to time, vertical movement of prices and repeating events. In an ideal world, any price movements must follow a dynamic sectional price risk path, preferably following at least one sequence of sections. Any deviation from such at least one sequence in sections preferably indicates sudden market changes, either adding more risk in trading or reducing risk in trading.

The price perception can be categorized based on its distance from a particular analysis tool. At least one bullish level preferably represents bullish belief above analysis tool and at least one bearish level preferably represents bearish belief below analysis tool. For descriptive purposes, such at least one bullish level is designated as section “a”, section “b” and section “c”; likewise such at least one bearish level is designated as section “d”, section “e” and section “f”

For design purposes, section “a” comprises the furthest lowest price perception for a bullish believer from a selected analysis tool, section “b” comprises the reasonable price perceptions accepted by the bullish believer for a market vehicle from a selected analysis tool **1320**, for a selected time period, and section “c” comprises the furthest highest price perception by a bullish believer, for a market vehicle, over a selected time period. Price perception risk **245** for bullish believer may preferably fall in to section “a”, section “b”, or section “c”. For ideal market behavior, the sequence must be section “a”, then section “b”, then section “c” for a bullish believer, making a bullish sequence.

Section "d" preferably comprises the furthest highest price perception below a selected analysis tool **1320** for a bullish believer, section "e" comprises the nearest highest price perception values for a bullish believer for a market vehicle below a selected analysis tool, for a selected time period, and section "f" comprises the furthest lowest price perception values for a bullish believer, for a market vehicle below a selected analysis tool, over a selected time period. Price perception risk **245** for bearish believer may preferably fall in to section "d", section "e", or section "f".

When a mix occurs of highest perception of prices and second lower perception of prices, prices are magnetized towards the current values of a selected analysis tool, and prices enter section "d" then returns to section "c" and repeats up to about 27 times, before prices are completely attracted to current value of a selected analysis tool.

In section "e", trader's perceptions are reasonably priced for taking risk to sell the market vehicle, as it is losing value suddenly. The trader's second perception is that, he will lose more value of market vehicle, if he holds them longer. A bullish believer reacts to sell its own inventory, plus any other opportunist's inventory, who make a similar decision based on such observation established in section "e". The time duration of section "e" is shorter in most cases and does not often happen in general bullish belief for market vehicle, but may happen, if some bad news or other factors in market exists and is used for taking profit.

In section "f", trader's perceptions are reasonably priced for eliminating risk by holding the market vehicle, as it loses value suddenly. The trader's second perception is that, he will lose the value of market vehicle further and financial damage could be far beyond normal, if he holds them any longer. The reaction of a bullish believer is to sell his own inventory, plus other opportunist's inventory, who make similar decision based on such observation of success established in section "f". The time duration of section "f" is shorter in most cases and does not often happen in general bullish belief for market vehicle, but may happen, if some bad news or some other factors in market does exist and by losing faith in the market vehicle.

Perception indicators **510** preferably differentiate between sections, and preferably indicate confirmations. Perception indicators **510** preferably use colors for differentiation, so for illustrative purposes have been labeled on FIG. 5. Confirmations in perception indicators **510** preferably are indicated through the use of "+" signs. Perception indicators **510** may preferably also utilize arrows to differentiate directionality.

Definitions of meaning of section labeling in examples shown in FIG. 5:

"MDSPR – a" (indicator label **1310**): There are no catalysts and the market vehicle is in section "a".

"MDSPR - c +" (indicator label **1320**): There is one catalysts and the market vehicle is in section "c"; this means user **110** may want to take a risk to go long, as there is a very low risk and is double confirmed.

"MDSPR - b ++" (indicator label **1330**): There are two catalysts and the market vehicle is in section "b"; this means user **110** may want to take a risk to go long, as there is a very low risk and is triple confirmed.

Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as clarity, cost, user preference, etc., other perception indicators, such as, for example, stars, numbers, letters, etc., may suffice.

Price perception risk **245** may preferably be represented in real time using the following type of formula:

4 - "MDSPR - b++"

where 4 is indicating that the current prices (either open, close, high, low - user choice) are in price perception risk **245**. MDSPR - b indicates that the values of price perception risk **245** are in category "b" for bullish believer on a current bar, and there are two additional catalyst confirmations in support of price perception risk **245** and the risk to go bullish is very low as there is a triple confirmation for bullish belief.

FIG. 6 shows a screenshot view, illustrating at least one internal movement indicator **520**, according to the preferred embodiment of FIG. 1. Regardless, where the prices are, whether they are trending or not, or going sideways, there are risks associated with sudden market conditions changes, which can be located in any time frame, by inventing proper tools. In order to identify them, in real-time, in a particular time frame, during any trend development, consolidation, retracement, they need to be separated and highlighted or given special symbol. In addition, there are spots, where a well established trend looks great from outside on normal bar, candles, or line charts, but internally, the conditions are deteriorating, but they are not oblivious by looking at traditional methods or charts. So due to their sudden occurrence, it either costs the trader or causes missed opportunities. Internal market moving risk **215** preferably is displayed through internal movement indicator **520**, which preferably show such conditions as they happen, alternately preferably warn user **110** well in advance of conditions happening, preferably working as a forecasting tools for future decision making in trading.

In this filing, applicant has modified the turquoise bars with additional market conditions to make them more efficient. A plus sign [+] indicates one modification, a double plus [++] shows two modifications to normal types.

For illustrative purposes, the following labels have been used in the drawings of this application to distinguish differently colored bars:

Turquoise Bar: - [Tb] (indicator **1410**)

Turquoise Bar+: - [Tb+] (indicator **1415**)

Golden Bar: - [GB] (indicator **1420**)

Golden Bar+: - [Gb+] (indicator **1425**)

Bull belief warning: - [Bw] (indicator **1430**)

Bear belief warning: - [Bew] (indicator **1435**)

Gray Bull: - [Mbu] (indicator **1440**)

Pink Bear: - [Mbe] (indicator **1445**)

Tdo Extended (-34) MHRIC Bull - [le] (indicator **1450**)

Tdo Extended (+34) MHRIC Bear - [le(-)] (indicator **1455**)

Neutral bar: - [Ne] (indicator **1460**)

Future possible high: - [10] (indicator **1470**)

Future possible low: - [9] (indicator **1475**)

When a market vehicle has been sold for a long time or a short time, some traders believe that it is time to step in to the trade or do a trial/small test trade, even though prices are previously going against what they want to do. Alternately, institutions may make a decision that the market vehicles are reasonably priced to take a small amount of risk, or alternately, the institution's research department starts believing that, a particular market vehicle has a near term or medium term or long term potential in the direction research indicates, then the institution will try to test the market with the prices agreed in the research. In some cases, a technical department may also come with some recommendations, based on their analysis in one or multiple timer periods. Internal movement indicator **520** preferably shows events of internal movement of market, where an outside trading community has the least amount of warning. Bull belief warning (indicator **1430**) and bear belief warning (indicator **1435**) preferably indicate such warning.

Usually after formation of bull belief warning, in many cases, many traders start observing some directional movement in a specific time frame or alternately in several time frames, indicating a directional bullish movement has started taking place and a flow of orders starts coming in. Gray bull (indicator **1440**) conditions are formed, which preferably is a low risk entry for the bullish direction, as the bullish belief gets converted into a bullish direction at first evidence.

Usually after formation of bear belief warning, in many cases, many traders starts observing some directional movement in a specific time frame or alternately in several time frames, indicating a directional bullish movement has started taking place and a flow of orders starts coming in. Pink bear (indicator **1445**) conditions are formed, which preferably is a low risk entry for bearish direction, as the bearish belief gets converted in to a bearish direction at first evidence.

Tdo Extended (-34) MHRIC Bull (indicator **1450**) and Tdo Extended (+34) MHRIC Bear (indicator **1455**) are preferably created using various components of price perception risk **245**, preferably providing better entries for bullish belief or bearish belief and per the location of those components. At least one indicator maybe used to find an extended location with no time delays factors. Using internal market moving risk **215** preferably reduces risk for the entry either for bullish believers or bearish believers.

Internal market moving risk **215** preferably comprises multi-dimensional bull entry (indicator **1480**) and multi-dimensional bear entry (indicator **1485**), which preferably is based on multiple confirmations of multiple dimensions as per user selection in a design; this may preferably give user **110** an entry based on a risk assessed overall based on many factors, not only on one particular component of a selected dimension or a single dimension.

Internal market moving risk **215** preferably additionally indicates when there is an equilibrium between bullish believers and bearish believers in a particular time frame, at a peculiar level or range of levels, using one or more dimensions, by utilizing a neutral bar (indicator **1460**). Neutral bar (indicator **1460**) preferably indicates that the direction can go either way. Neutral bar preferably shows an area of equilibrium, with a pinpoint neutral bar location timing.

Using the components of multiple dimensions, as discussed in this application, future possible highs (indicator **1470**) and future possible lows (indicator **1475**), are preferably designated as "risk conditions are met" for extensions from that point.

Internal market moving risk **215** may preferably be represented in real time using the following type of formula:

5 - SMSMCR - 7h, 5h, 1+

where 5 is indicating that the current prices (either open , close, high, low - user choice) are in internal market moving risk **215**, SMSMCR -7h, 5h, 1+ indicates that there are multiple sudden market conditions going on at the same time, 7h indicates that future possible highs are possible, 5h indicates that a Tdo 55 Extended (-34) MHRIC bull condition exists, 1+ indicates that there is a Turquoise Bar+ condition existing, where Turquoise bar itself has an additional one more

confirmation, therefore SMSMCR -7h, 5h, 1+ has six confirmations in bullish direction and the risk is very low to step in as a bullish believer.

Additionally, there are many events in trading, which occur due to satisfying several conditions at a same time or series of conditions met on a sequential basis. Traders look at them happening, confirming manually and then make informal decisions to trade, but the manual process of confirming is insufficient in trading quickly and sequencing them manually is a difficult and time consuming process. Multiple conditions risk **235** preferably comprises an automatic sequencing and confirmation of multiple conditions, which derive special meaning and indications for trading, in real-time. Indicators for multiple conditions risk **235** preferably take out the time consuming process of manual handling of special conditions and special conditional sequences. Some of these special conditions can be designed by using the various methods of analysis of market risks **205**, as detailed within the teachings of this specification, using traditional indicators, patterns, oscillators, etc., to preferably develop special conditional risk indicators.

Multiple conditions risk **235** may preferably be represented in real time using the following type of formula:

6 - [SCMR-6] / [SCMR-1] / [SCMR-13A] **

Where 6 is indicating that the current prices (either open , close, high, low - user choice) are in multiple conditions risk **235**, [SCMR-6] indicates that there is a bull rare entry on daily chart, which is a bullish belief, [SCMR-1] indicates that there is a turquoise bar formed on current time frame; this is a bullish belief, [SCMR-13 A] indicates that there is PdM -Bear situation, ** indicates conflict due to [SCMR-13 A], as it is in a bear condition.

There are many types of fundamental economical risk (economic event risk **225**) identified over the period of time preferably comprising interest rate risk, employment data risk, current accounts risks, payroll reports, trade balance, manufacturing numbers, PPI, CPI, home sales, GDP prices, construction spending, earning reports, inventories, and durable goods. Upon reading the teachings of this specification, those skilled in the art will now appreciate that, under appropriate circumstances, considering such issues as future economic reports, costs, etc., other fundamental economic risks, such as, for example, price rank, group rank, P/E Ratio, debt/equity ratio, date of earning, earning growth, projected earnings, earning estimate, growth ratio, rank of earning, accumulation and distributions, cash flow and its growth, insider trading, dividend, outstanding number of shares, dividend yields, may suffice.

Economic event risk **225** preferably addresses erratic movement in the market from related to the fundamental economical risks as they occur. User **110** may preferably have an

automatic notification on the software, preferably by alert, preferably at the time of it happens or alternately preferably pre-program and shown during normal trading. Additionally, economical event of the past may preferably be plotted preferably by having it programmed as an indicator and superimposing it to the price charts or, alternately preferably by making a separate fundamental health risk dimension.

Economic event risk **225** may preferably be represented in real time using the following type of formula:

7 - [GDP-1] / [PPI-1] US 1/30/09 830 AMEST -Htr(1)D(3)

where 7 is indicating that the current prices (either open, close, high, low - user choice) are in economic event risk **225**, GDP indicates that there is GDP economical number due at 8:30 AM EST for USA on 1/30/09, PPI producer price Index for USA will be announced at 8:30 AM EST on 1/30/09, Htr(1)D indicates that the current dimensional spectrum is bullish on a daily chart for last three days.

In FIG. 5, multi-dimensional confirmations are shown. By using multiple dimensions (zone range risk **275**, time duration risk **255**, trend health risk **265**, price perception risk **245**, internal market moving risk **215**, multiple conditions risk **235**, economic event risk **225**) together, user **110** preferably receives real-time multi-dimensional confirmations, comprising multiple sources of market vehicle influences.

At least one multi-dimensional indication **550**, as shown in FIG. 5, shows a combination of indicator label **1330**, internal movement indicator **520** and fixed time spectrum ribbon **1170**; each are strong indications for bullish believers, and together provide multidimensional confirmation. Multi-dimensional indications **550** are preferably applied to time frame charts starting from ticks to multiple-minute charts. Variables, such as last value, highest sum, and time frame location compared to bigger time frame, specific values of market vehicle on a specific selected time frame, values when specific conditions met, cumulative values, absolute values for cumulative specific conditions, combinations of cumulative values, and values at specific combinations and other user choice of conditions, may be used.

Although applicant has described applicant's preferred embodiments of this invention, it will be understood that the broadest scope of this invention includes modifications such as diverse shapes, sizes, and materials. Such scope is limited only by the below claims as read in connection with the above specification. Further, many other advantages of applicant's invention will be apparent to those skilled in the art from the above descriptions and the below claims.

What is claimed is:

1) A computer system, relating to real-time market analysis, comprising:

a) at least one market feed computer processor structured and arranged to process at least one real-time market feed to determine real-time market data;

b) at least one risk factor computer processor structured and arranged to automatically calculate current values of each of a plurality of market risk factors from such real-time market data;

c) at least one analysis computer processor structured and arranged to real-time analyze at least one combination of such market risk factors to quantify at least one market risk;

d) at least one risk assessing computer processor structured and arranged to assess relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and

e) at least one risk indicator computer display structured and arranged to display such at least one risk indicator.

2) The computer system according to Claim 1 further comprising at least one risk factor computer display structured and arranged to display at least some of such current values of such plurality of market risk factors.

3) The computer system according to Claim 1 further comprising at least one time-frame computer processor structured and arranged to calculate each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time.

4) The computer system according to Claim 3 further comprising at least one time-frame computer display structured and arranged to display, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors.

5) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one bounded range risk computer processor structured and arranged to automatically calculate current values of at least one historic value range boundary risk factor.

6) The computer system according to Claim 5 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one historic value range boundary risk factor to determine when to display at least one historic value range boundary risk indicator.

7) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one time-duration risk computer processor structured and arranged to automatically calculate current values of at least one time-duration risk factor.

8) The computer system according to Claim 7 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one time-duration risk factor to determine when to display at least one historic value range boundary risk indicator.

9) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one trend health risk computer processor structured and arranged to automatically calculate current values of at least one trend health risk factor.

10) The computer system according to Claim 9 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one trend health risk factor to determine when to display at least one trend health risk indicator.

11) The computer system according to Claim 9 wherein said at least one risk factor computer display comprises at least one summation of at least one count of positively showing of such plurality of market risk factors and at least one negative count of negatively showing of such plurality of market risk factors.

12) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one price-perception risk computer processor structured and arranged to automatically calculate current values of at least one price-perception risk factor.

13) The computer system according to Claim 12 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one price-perception risk factor to determine when to display at least one price-perception risk indicator.

14) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one internal-market-movement risk computer processor structured and arranged to automatically calculate current values of at least one internal-market-movement risk factor.

15) The computer system according to Claim 14 wherein said at least one analysis computer processor analyzes at least one combination of such current values of at least one

internal-market-movement risk factor to determine when to display such at least one internal-market-movement risk indicator.

16) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises economic-event risk computer processor structured and arranged to automatically calculate current values of at least one economic-event risk factor.

17) The computer system according to Claim 16 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one economic-event risk factor to determine when to display at least one economic-event risk indicator.

18) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least one multiple-conditions risk computer processor structured and arranged to automatically calculate current values of at least one multiple condition risk factor.

19) The computer system according to Claim 18 wherein said at least one analysis computer processor analyzes at least one combination of such current values of such at least one multiple-conditions risk factor to determine when to display at least one multiple-conditions risk indicator.

20) The computer system according to Claim 1 wherein said at least one risk factor computer processor comprises at least two of the following:

a) at least one bounded range risk computer processor structured and arranged to automatically calculate current values of at least one historic value range boundary risk factor;

b) at least one time-duration risk computer processor structured and arranged to automatically calculate current values of at least one time-duration risk factor;

c) at least one trend health risk computer processor structured and arranged to automatically calculate current values of at least one trend health risk factor;

d) at least one price-perception computer risk processor structured and arranged to automatically calculate current values of at least one price-perception risk factor;

e) at least one internal-market-movement risk computer processor structured and arranged to automatically calculate current values of at least one internal-market-movement risk factor;

f) at least one economic-event risk computer processor structured and arranged to automatically calculate current values of at least one economic-event risk factor; and

g) at least one multiple-conditions risk computer processor structured and arranged to automatically calculate current values of at least one multiple condition risk factor.

21) A computer method, relating to real-time market analysis, comprising the steps of:

a) processing, by at least one computer, at least one real-time market feed to determine real-time market data;

b) automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors from such real-time market data;

c) real-time analyzing, by such at least one computer, at least one combination of such market risk factors to quantify at least one market risk;

d) assessing relevance, by such at least one computer, of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and

e) displaying, by such at least one computer, such at least one risk indicator.

22) The computer method according to Claim 1 further comprising the step of displaying, by such at least one computer, at least some of such current values of such plurality of market risk factors.

23) The computer method according to Claim 1 further comprising the step of calculating, by such at least one computer, each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time.

24) The computer method according to Claim 3 further comprising the step of displaying, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors, by such at least one computer.

25) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one historic value range boundary risk factor.

26) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one time-duration risk factor.

27) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market

risk factors comprises the step of automatically calculating current values of at least one trend health risk factor.

28) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one price-perception risk factor.

29) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one internal-market-movement risk factor.

30) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one economic-event risk factor.

31) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises the step of automatically calculating current values of at least one multiple condition risk factor.

32) The computer method according to Claim 1 wherein such step of automatically calculating, by such at least one computer, current values of each of a plurality of market risk factors comprises at least two of the following steps:

a) automatically calculating, by such at least one computer, current values of at least one historic value range boundary risk factor;

b) automatically calculating, by such at least one computer, current values of at least one time-duration risk factor;

c) automatically calculating, by such at least one computer, current values of at least one trend health risk factor;

d) automatically calculating, by such at least one computer, current values of at least one price-perception risk factor;

e) automatically calculating, by such at least one computer, current values of at least one internal-market-movement risk factor;

f) automatically calculating, by such at least one computer, current values of at least one economic-event risk factor; and

g) automatically calculating, by such at least one computer, current values of at least one multiple condition risk factor.

33) A computer system, relating to real-time market analysis, comprising:

a) market feed computer processor means for processing at least one real-time market feed to determine real-time market data;

b) risk factor computer processor means for automatically calculating current values of each of a plurality of market risk factors from such real-time market data;

c) analysis computer processor means for real-time analyzing at least one combination of such market risk factors to quantify at least one market risk;

d) risk assessing computer processor means for assessing relevance of each quantity of a plurality of such at least one market risks to determine when to display at least one risk indicator; and

e) risk indicator computer display means for displaying such at least one risk indicator.

34) The computer system according to Claim 33 further comprising risk factor computer display means for displaying at least some of such current values of such plurality of market risk factors.

35) The computer system according to Claim 33 further comprising time-frame computer processor means for calculating each of such plurality of market risk factors relating to each of a plurality of time frames ending at about current real-time.

36) The computer system according to Claim 35 further comprising time-frame computer display means for displaying, relating to each of such plurality of time frames, at least some of such current values of such plurality of market risk factors.