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THE FEATURES OF APPLICATION OF THE EXPERT TRAINING SYSTEMS FOR THE AUTOMATED ESTIMATION OF QUALIFICATION OF THE PROFESSIONAL PARTICIPANTS OF SECURITIES MARKET

The transition of The Russian Federation to the market relations causes the emergence of a process of deep structural changes in the economic system, the development of which is a covariant degree function to the rational construction of the financial system in a wide sense.

The process of informatization of the problem environment of the institutional financial intermediation of Russia actualizes the need in the development of software-diagnostic tools for the organization of the actions on the estimation of qualification with the purpose of subsequent certification of the professional participants of the stock market.

The given subject area (the problem environment) is characterized by the fact, that the process of production, distribution and consumption of the goods, works and services (GWS) is inevitably accompanied by the fact, that at some economic subjects (NP, LE and country) form the temporarily free money means, and, at the same time, the other subjects of market are deficient for the carrying out of their commercial programs (interests). The surplus subjects (owners) of money means here act as the suppliers of capital (creditors), and those who need in money means as the consumers of capital (borrowers). The creditors act as the sellers of temporarily available means and the buyers of obligations of the borrowers, and the borrowers, in turn, are the buyers of necessary means from the creditors and the sellers of their obligations, legally guaranteeing to the creditors the right of claim – the return of the provided amount on the contractual terms of urgency and payment. In the result, the structurally complex financial market (foreign exchange, gold and capital) arises, where the money and instruments make their own movement, separately from the movement of GWS.

The economic relations of the involved participants, as the duplex interaction between the sellers and buyers, on the stock market can be carried out by the different way, but the conceptually two main schemes (forms) of financial intermediation can be distinguished: the direct – the buyer in exchange on the financial obligation receives the resources directly from the seller (the lack of given scheme is due to the large-wholesale, the private character of sales and narrows the range of possible buyers, the transition to the given scheme of interaction of the subjects causes the financial disintegration of the country); the mediated financing – Involves the presence of the financial institutions, which accumulate the free means of various surplus subjects and provide them on their own behalf on the contractual mutually beneficial terms to the deficient subjects (the given scheme eliminates the shortcomings of the previous one and additionally provides a wide range of economic benefits as both for the suppliers, and for the consumers of capital, for example: the wide range of financial instruments, the diversification of risk, the verification of credit history, liquidity, solvency of subjects and etc.). The markets of institutional (accumulative-distributive) mediated borrowing contribute to the increasing of the level of integration of the financial system of the country.

Thus, the accumulation and placement of financial instruments in the limits of the financial system between the deficit and surplus subjects is directly related with the functioning of institutional intermediaries (the professionally diversified participants) on the financial markets.

The market of securities (the stock market) is the object of state regulation (represented by the authorized bodies), the main purpose of which – to protect the rights (interests) of investors from the illegal actions of issuers and intermediaries. In particular, "The federal commission on the market of securities" ("FCMS") defines the system of qualification requirements and tests to the senior managers, middle managers, supervisors and specialists of organizations, engaged in the specialized or diversified professional activity as the broker, dealer, manager, the organizer of trade, clearing centre, depositary and registrar.

The qualification tests (examinations) are divided into two levels: the basic (single for all) and specialized (by the kinds of activity of the professional participant): for the senior managers, middle managers and supervisors of organizations – the series 1.0 (the dealer and brokerage activity), 2.0 (as manager), 3.0 (as the organizer of trade), 4.0 (the clearing activity), 5.0 (the depository activity), 6.0 (the maintenance of registry), and also for the specialists (full-time employees) of the organization, working: as brokers and dealers – the series 1.1 (with the state securities of RF), the series 1.2 (with the corporate securities), the series 1.3 (with the derivative securities); performing the activity as the managers of assets – the series 2.1 (the mutual investment fund), the series 2.2 (the investment fund), the series 2.3 (the non-state pension fund); for the specialists organizers – the series 3.1 (the exchange trading), the series 3.2 (the off-exchange trading); for the specialists of the specialized depositories – the series 5.1 (the mutual investment fund), series 5.2 (the investment fund).

The qualification certificates of “FCMS” are the documents, certifying the compliance of the examinees with the established qualification requirements.

The qualification examinations are conducted by the authorized organizations and the specialized training centres.

For the obtaining of the qualification certificate the professional participants of the stock market must successfully pass first the basic, and then the specialized (by the kind of activity, relevant to the specified series) levels of qualification tests, while meeting all the regulatory established formal and essential requirements of “FCMS”.

For the automation of carrying out of the qualification tests it was used the developed in the environment of programming “Borland C++ Builder”, - the software toolkit (the expert training system).

As the expert-methodical source of tasks, encapsulated as the basis of the knowledge base of the software complex, were used the textual techniques, stratified by the series and recommended by “FCMS” to the usage.

In the mode of administrating the electronic questionnaires (tasks) were formed according to the described series of certification tests: the textual content of questions, the variants of answers; the interactive graphical support; the type of selector of the variant; the explanations (in the case of incorrect answer the examinee will be aware of the complete exhaustive explanation) and etc.

After the launching of the software means the user is invited to do 3 steps (each step is illustrated by the flickering banners and pop-up tooltips): to choose the series of qualification test, corresponding to the specifics of the professional activity on the market; to pass the procedure of authentication; to start the mode of diagnostics.

The examinee is invited to pass the entire examination cycle of question-answers structures before the appearance of the final placard-warning (also in the process of diagnostics at the functional level of the complex for the examinee break may be provided). The estimation of qualification is carried out in the real time on the basis of the algorithmically integrated scales, and the documentation of the results of diagnostics is carried out in the special database.

The network interaction between the automated workplaces and the head module is carried out by means of the local area network in the organization, or on the basis of the virtual private network with using the technology “VPN” (“Virtual Private Networking”)-tunneling in “WWW” (“World Wide Web”).

It should be noted, that the sphere of application of given development is potentially not limited to the discussed example. Now we are carrying out the modifying of the realized product with using the environment of programming “Borland J++ Builder”, the technological excellence of which will allow to use the new version of the product yet for the building of the structure of the open educational portal on one from the Web-servers in “WWW”. But to the shortcomings of the latter approach include: the difficulty of creating of the specific software environment of the period of execution and the organizing of actions on the ensure of information security of the server.