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THE USE OF OPPOSING PARTIES' RECONCILIATION MODEL FOR LEARNING ORGANIZATION AND KNOWLEDGE MANAGEMENT

It is used information model to manage and control using knowledge of the organization. This model is universal and it may be used for learning organization and knowledge management, thus for optimization of the learning process.

First of all it is necessary to examine knowledge utilization "the channel" to build a model. So, statistically it must be learnt the process of acquiring knowledge. This is a statistical analysis of learning process for students to learn by observing the teacher, the student and the teacher's assessment of the quality of the used knowledge.

Keywords: control of assimilation of the knowledge achieve optimization in the learning process, introduction of redundancy in the System.

Learning process is crucial to the learning organization and knowledge management. The procedure of the using the knowledge can be seen as opposing parties' agreement (contract). Opposing parties are the pupils on the one hand, and on the other side – the teacher or the student and the teacher, but it is in no way antagonistic confrontation, the goal of mastering the knowledge of both parties is high quality.

Consider the development of a new model of knowledge, which is the control and management of both the student and the lecturer. This method allows to determine with high accuracy and reveal the weakness of using knowledge of students and lecturers involved in the learning process and provide them with identified deficiencies.

Opposing parties' peace agreement based on a model analysis of the market economy [1].

This model is mainly used for the goods market model, purchased and sold (required – supplied) goods number and price of the main variables mentioned here. Figure 1 below illustrate the model used for the analysis.

Let's say one of the goods market is characterized by demand and supply functions.

$$D = D(P), \qquad S = S(P)$$

Where P is the price of the goods, as mentioned.

The fulfillment of the condition is necessary for the market balance (i.e., the price must be such that the goods can be sold) $D(P) = S(P)$.

Consensus equilibrium price $\bar{P}$ is given with this equation; it is possible to have multiple solutions. The volume of goods sold and purchased, which was marked $\bar{X}$ - is given in the following equation: $\bar{X} = D(\bar{P}) = S(\bar{P})$.

We will get the dynamical model when we have a delay on demand or supply. The simplest model of discrete analysis belongs to the same late (or behind) the intervals $D_t = D(P_t)$ and $S_t = S(P_{t-1})$.

This may occur when the period of time required for the production of goods taken from space. This fact may be considered in the following fashion. If we know the previous trading price P_{t-1} of the current market for the supply of goods by P_t function. P_t should be formulated such a way that the volume of goods to be sold.

Otherwise, we say that the P_t price and imported – sold goods volume X_t is characterized by the equation:

$$X_t = D(P_t) = S(P_{t-1})$$

Therefore, if we know starting price P_0 with this equation it is possible to determine P_1, X_1 then we can determine what P_2, P_2, X_2 and so on. In general,

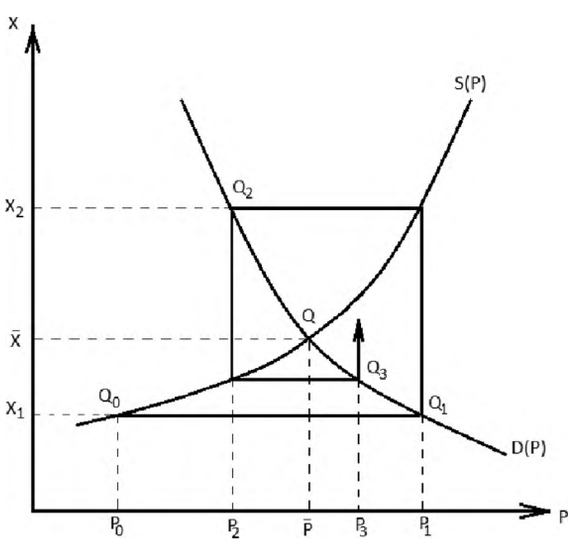

Fig. 1. The like spider model (for the goods market)

P_t price changes are characterized by the quation $D(P_t)=S(P_{t-1})$.

Solution of this equation can be graphically as well as analytically. Figure 1 – is given the model like spider (the goods market).

$D(P)$ – the demand curve;

Q – the supply curve;

Q – crossing (i.e. optimization) point

P – price;

X – the volume of supplied goods.

In this chart. 1 – the curves $D(P)$ and $S(P)$ correspond demand and supply functions, and $\bar{p}$ and $\bar{x}$ values of Q the intersection point of these curves.

The dynamical model of $D(P)$ function has the same meaning as static, but $S(P)$ ordinates curve showing the amount of goods supply in the given time, which depends on the previous trade price and the transaction that holds the current market. The price of the goods at the initial moment of time is equal to the corresponding point P_0 and Q_0 of $S(P)$ curve shows the volume of goods shipped in the first period. At this time the entire amount of goods supplied X_1 sale price of P_1, which gives Q_1 point to the demand $D(P)$ curve is the same as X_1 ordinates have to Q_0.

The second period starts from the vertical movement of Q_1 at point $S(P)$ curve crossing point, which corresponds to the volume of goods X_2. This movement continues $D(P)$ curve Q_2 point. This point is characterized by the P_2 price. This will allow us to continue the process of network schedule, which is given in Figure. Buying – selling price and volume reflect properly $D(P)$ curve at the points Q_1, Q_2, Q_3 etc.

The sequence of dots in this endeavor and most of the points of Q point deployments sometimes left, sometimes right on this point. The price P_t is seeking $\bar{p}$ price for similar capacity X_t is seeking sold goods $\bar{x}$ volume, which corresponds to the quantity of goods purchased.

The model is universal and can be used in all types of dispute between opposing parties and the administration.

This model is universal and can be used in any of the opposing parties to the agreement. According to this model discord buyer and seller, and the task is to reach a deal when both sides are equally to be satisfied that there will be a balance in the market, i.e. Imported goods will be sold at an optimal price.

We also consider the relationship between the opposing sides in the process of knowledge development process. Although this process is generally antagonistic and both sides have the same goal, which is to utilize a high degree of knowledge, but the process of its psychological nature, the process is still controversy, and it can be run using the model.

Because of the difficulty of raising children, and created controversy among educator, but this process is, as already mentioned above should not be antagonistic. Therefore, in order to achieve a good model for the study of educational environments as well.

One item discussed above, the dynamic model can be used to study the market at the moment. In turn, this phase of the program is characterized as a period of adaptation to the student's knowledge level, roughly speaking, can not stand the supply of advance knowledge of the software developed, i.e. requires getting used to it. Therefore, one can study the dynamics of use in order to come to a point when it will be possible to pre-program developed in accordance with the act. For this purpose, we can use a network model for a short period of time will lead to the adoption of knowledge. The previous phases of the material here are meant to deliver such a way that it will be completely overcome.

Then, when a group of listeners will be called complete, it will be possible to move to the statistical model, the learning process will no longer be dependent on the previous stage, the face of schedules, which is based on the observation group statistics are given on Figure 2.

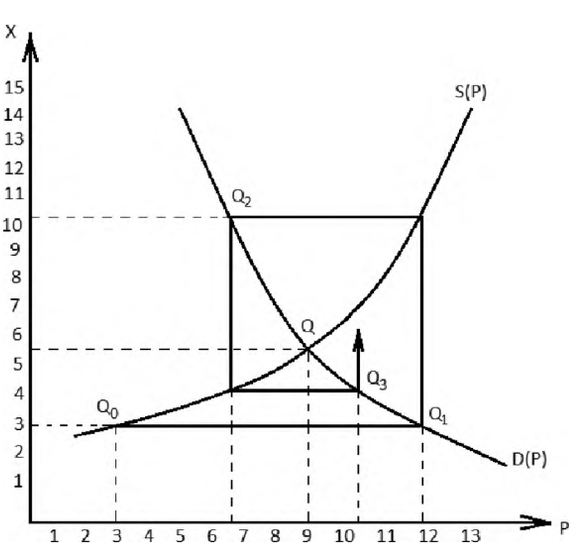

Fig. 2. The like spider model
(for learning organization and knowledge management)

$D(P)$ – the demand curve;

$S(P)$ – the supply curve;

Q – supply and quality of knowledge according to the time;

P – depicted in scores of knowledge to assimilate;

X – number of the information provided.

Graphic P is depicted in scores of knowledge absorption schedule. $D(P)$ and $S(P)$ – the

knowledge of the demand and supply functions of knowledge.

Explain what we mean by a dynamic model of knowledge utilization. The material was supplied in such amounts and forms must be provided to make it possible for students to learn. The following sections will gradually be increased and improved content material for the best result will be software development. (i.e. introducing a system of abundance)

Thus, it will be provided with the knowledge of mastering the use of a static model (the curve will not be any of the above-mentioned period preceding the data) is built. Consider the utilization of knowledge in this model is more detailed.

Knowledge to explore the dynamic model of the demand $D(P)$ curve has the same meaning as the static model, only the knowledge of $S(P)$ curve ordinatebi showing a knowledge of the amount of time in the knowledge development attitude, which is in charge of the learning process of the previous period.

P_0 corresponds to the initial moment of time, the degree of utilization of the knowledge assessment, which in turn affects the knowledge of Q_1 units of $S(P)$ curve to provide knowledge and training in the first period, the number of X_1. All of the materials provided will be used and reflected in the P_1, which corresponds to a point Q_1 knowledge of the needs of $D(P)$ curve at the same coordinates X_1, which Q_0 the second period. Q_1 from the point on the vertical movement of the $S(P)$ curve, which gives the X_2 point. This movement continues horizontally Q_2 point $D(P)$ curve. The point P_2 is characterized by the development of knowledge.

$D(P)$ curve discussed in this points sequence aspiring Q point. At that point either to the left or to the right of the point Q take turns stationed.

Strive for the best utilization of the P_t values of $\bar{p}$ rate. Similarly, the amount of knowledge provided by the points X_t deployed by $\bar{x}$ point above and below, respectively. If $D(P)$ curve comes from the top to down, and $S(P)$ top-down, then the closing oscillations filling and $D(P)$ curve equilibrium point Q will have a greater inclination than the $S(P)$ curve. Movement will be continuously growing, while the $D(P)$ curve will have less inclination than the same point in $S(P)$ curve. If they both have the same inclination curve will be drawn at regular vibration, that is neither closing nor continuously growing.

The model is easily noticeable delay interval that is used for program adaptation, $D(P)$ Q point of the curve inclination must be greater than $S(P)$ curve. In this case, the considered equation has a single solution. The higher the difference in inclination curves, the sooner we come to the Y and Q point is well adapted to normal before the end of the program [2].

As was said above the curves correspond to the crossing point Q and utilized the knowledge of $\bar{p}$ equilibrium point, but it is possible and in many cases it will be found that does not match the high $\bar{p}$ paused. For this program to be overcome at a higher level, $\bar{p}$ equilibrium point should move to high-evaluate the way that the balance between supply and material used is not lost.

Lifted to the level of the teacher will have to provide the extra work, which means that the quality and quantity of the material supplied to the increase in demand should lead to a proportional increase. This will require the delivery schedule of the curve remain unchanged, while the demand curve is parallel to the first move to until you achieve the best measurement. This is reflected in the following chart

In the case when the adaptation is finished and move on to the normal training program at a high level, it will be possible to manage the process of learning to use these curves, which were built at the same time and at no time were any of the offset. In this case, the learning process is important for management to have a crossing point of the curves, i.e. the best spots to explore. Thus, the proposed model enables us to look into the knowledge of the quantitative quantities of information that must be provided to students in order to achieve the best utilization of knowledge[3].

The model is controlled according to the knowledge of the process of learning as a student who has not mastered properly or not or materials provided. The teacher, who did not or could not provide information to students that the material is suitable for mastering.

The best utilization of $\bar{p}$ point deviation to the right indicates a shortcoming in the pupil of the left – the teachers, the materials are incomplete. In addition, these gaps are numerically the largest deviations, which will enable us to manage learning process, i.e. numerically specify how the student has mastered the material can not be transferred or the amount of material the teacher tried to students. That's why we say that the model is equally accurate control of both the students and the teacher.

References

1. Баркалов С. А. Информационные технологии в управлении и организации : учеб. пособие / С. А. Баркалов. – Воронеж : Гос. арх.-строит. ун-т, 2002. – 84 с.
2. Buchashvili G. Concept of the system model of administration of the quality of the learning, international conference / G. Buchashvili. – Tbilisi, 2011.
3. Nanobashvili N. Wholeness of from Percepition at Multilevel (Heirarchic) coding and its Appedices Bull / N. Nanobashvili // Of the Academy of Sciences of the Georgian. – 2003. – № 4.

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ВИКОРИСТАННЯ МОДЕЛІ ПРИМИРЕННЯ ПРОТИЛЕЖНИХ СТОРІН У НАВЧАЛЬНОМУ ЗАКЛАДІ ТА ДЛЯ УПРАВЛІННЯ ЗНАННЯМИ

У роботі представлено інформаційну модель управління і контролю знань на базі «каналу» засвоєння.

Ключові слова: контроль засвоєння знань, досягнення оптимізації в процесі навчання, внесення надмірності в систему.

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SIMULATORS IN EDUCATIONAL PROCESS

In article are considered as it is used training apparatus in educational process. Tributes examples of different training apparatus. Application of technologies of interactive training, virtual the laboratory is considered.

Keywords: simulator, training systems, visual simulation, virtual simulator, virtual laboratory.

The requirements to modern training systems and complexes are very strict now. A number of training systems and simulators need to be completed with simulators of restart. Therefore the finished modern training system has to include besides means of "visual simulation" the means of "sensitive (restart) simulation". If you train somebody on purely computer simulators, there will always be a danger of preparing not real but "virtual experts" incapable of professional performance of real tasks. Thus, for example, the use of devices with the return tactile communication is not often replaceable. Not the small role by production of exercise machines and simulators is played also by the software. The software that is used in creation of modern computer games is generally used too. The software is created usually individually, depending on an objective. Time and cost of realization of trainers and simulators also depend on the specific project. Requirements to quality of graphics can be various and depend on the specific project. However, no less part is played by the support of 3D graphics at modern level, and also the possibility to use the 3D models created in popular programs for their creation.

Degree and quality of visualization in program applications can be rather difficult and realistic. When developing the network technologies, allowing creating complex trainers and simulators on the basis of which it is possible to train at once several experts.

Many professional skills demand elaboration before application in practice. And as a rule, training machines are used for this purpose. However, creation of simulators on the basis of these or those real objects can cost rather high, whereas trusting young specialists' management of the operating equipment – is the action very risky. Virtual simulators are actively applied in the modern world to allow such experts to fulfil the professional skills.