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Virtual communications and their influence on efficiency of an activity of agricultural entities

Scientific problem. Resource provision is determined to be a basic factor of any enterprise functioning, including agricultural one. Alongside with other resources, the workforce determines strategic success of an enterprise and becomes the ground of its competitiveness provision. The insufficient attention to this factor during the process of business decisions preparation and realization may result in the economic effect decrease.

Regardless the technical potential, organizational and other benefits, an enterprise won't start working efficiently without the rationally organized workforce.

Social and economic conditions of Ukrainian economic environment have resulted in catastrophic reduction of the workforce accompanied with the violation of optimal proportions of its elements. This problem motivates to prompt derive of the agricultural field out of a crisis state, the competitiveness and the sustain development of agricultural territories. It will

be possible only if experienced, talented and communicative leaders manage agricultural entities. In terms of the informational resource availability, the communication between managers of all levels enables to connect people as well as to increase the business activity efficiency.

Analysis of recent researches and publications. In the process of solution of a problem of the agricultural entity activity increase, the main attention is paid to the workforce. The problem of workforce influence on activity efficiency has become a subject of research for many domestic authors, among them are: Adamchuk V.V.[1], Amosha O. I.[2], Afonin A.S.[3], Bandur S.I.[4], Bilopolskyi M.H.[5], Bohynia D.P.[6], Hriniova V.M.[7], Daniuk V.M.[8], Dolishnii M.I.[9], Yehorshchyn A.P.[10], Libanova E.M.[11], Kachan E.P.[12], Kibanov A.Y.[13], Krushelnytska O.V.[14], Nyzhnyk V.M.[15], Soroka I.V.[16], Shchokin H.V.[17], Petiukh V.M.[18], Yakokka L.E.[19] etc. Regardless a significant number of scientific papers and publications, the actual measurement of the influence of the communication

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rate of agricultural entity managers on results of their business activity has not been executed.

The objective of the article is determination of the influence of the virtual communication of agricultural entity managers on business activity efficiency.

Statement of the main results of the study.

Modern management concepts are based on the idea that human resources are one of the most important economic resources of a company, a source of revenues, competitiveness and development. For instance, a well-known American manager Li Yakokka determines that «...all business operations are combined by three terms: people, production, profit. The main role is performed by people. Without talented specialists all attempts are needless [19]».

Among 124 countries with developing markets, which achieved the stable growth of the GNP by 5% during the whole decade beginning from 1980, 52% are democracies, 48% are authoritarian states. At least in the middle-term prospective the economic growth is determined not by a type of political system, but by the availability of managers, who are able to understand and to perform reforms, necessary for the further

growth implementing «good management» approaches, according to which the law dominates in favor and in the name of a human [20].

Trade resources are a social and economic category, which characterizes a share of active population that generates the potential workforce by accumulating physical, mental, practical, creative and other capabilities. The workforce generates value through the involvement in public production. It satisfies material and intellectual demands of population. The workforce becomes a part of resource potential of an agricultural enterprise and a subject of regulation in order to enhance the efficiency of their usage and to provide reproduction terms [21].

The workforce of an enterprise is a source of its business activity increase and a leverage, which influences its profitability. The main factors influencing enterprise business activity profitability are the following ones:

- the requested quantity of qualified workers;
- a high level of technical and general culture;
- the experience, the ability and the wish for working.

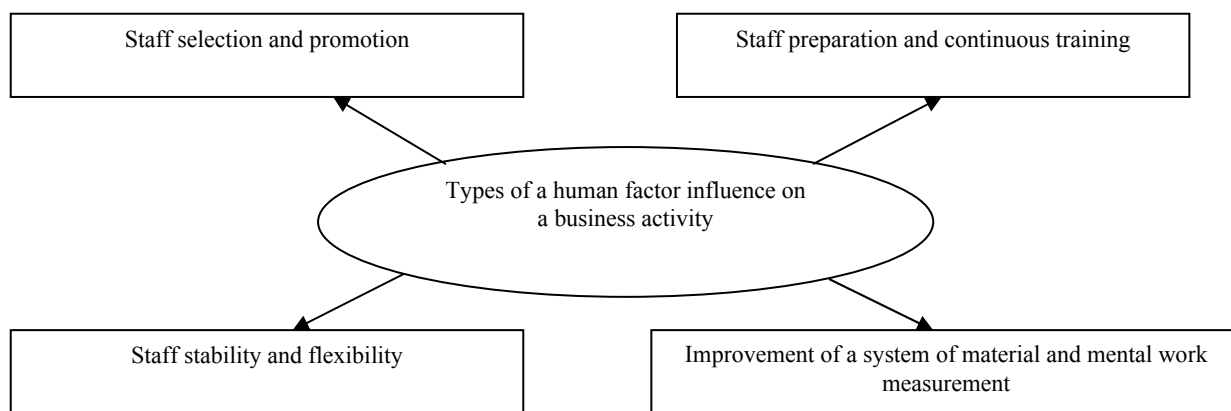


Figure 1. Basic types of the human factor influence on the business activity efficiency increase

Source: created on the basis of [10].

Staff appliance at enterprises is determined by changes in an increasing workforce productivity rate, which, in turn, improves production [22]. Without qualified staff none enterprise will reach its aim. One of the most important functions of the workforce refers to the enterprise cost minimization and the profit maximization.

The main types of the human factor influence on the business activity efficiency increase are presented in Figure 1.

In turn, the rational staff organization in certain agricultural enterprise must be organized by no one else but by its director.

The agriculture entity manager communicative competence is a basis of his life support, a guarantee of efficient activity and it requests the clear orientation on a professional situation and the selection of means of communication being the most efficient in the process of solution of communicative problems.

Agricultural entity managers and directors should take care not only of own communicative competence level increase, but also of the creation of the special working atmosphere, which enables all workers to communicate and to interact at the humanistic level, which, in turn, assist the communication culture creation.

The term «communicative culture» logically connects such features of communication as interaction, relations, contacts, exchange, mutual understanding in a certain system, that enables to determine the communication as the integral social, intellectual, psychological and moral creation, which is formed by the interaction of following factors:

- the communication as a basis of management;
- meetings as the most efficient method of discussion of actual problems;
- following the most known nowadays forms of communication;
- non-verbal communications as a form of communication;
- the appliance of ICT (informational and communicative technologies) in the creation of communicative culture of agricultural entity managers.

The efficiency of communicative function performance of the agricultural enterprise managers is represented in mutual satisfaction of all workers in business communication results and depends on the communicative competence of each laborer.

A director of agricultural enterprise is an influential subject of its activity. It is worth mentioning that a person empowered to make decisions within thresholds of his powers is able to maintain discussion and to be acquainted with the labor law; has knowledge regarding rights and obligations of a staff and assists their maintenance; have means of aim achievement and methods of control, efficiently implement leverages of the encouragement and the charge. The successful management and efficient production of agricultural enterprise mostly depend on a director educational level, professional skills, the working experience, skills to manage public mind of a working team.

In terms of the transformation to market economy, which is oriented on the consumption demand, requirements to managers change dramatically that, in turn, leads to a request for managers of a new generation, who are obliged with following features: high professionalism, knowledge on modern informational technologies, ability for prediction and forecast, possibility to adopt to an economic and social progress. A modern director must possess certain skills and personal features: to be good organizer, to be able to organize production and realization of new products and services as well as to know particularities of the acting law, to be deeply erudite, to be civilized person, independent, brave, able to organize a team of people thinking the same way, to be able to inspire and lead them, and also have high managerial skills.

Qualitative features of agricultural enterprise manager should be divided into three groups:

- the first group: legislative competence – knowledge of subjects of entrepreneurship activity laws, ability to quick adaptation to situational market changes, ability to take right decisions in emergency situations, knowledge of methods of working stimulation and a system of values being adequate to market economy;
- the second group – professional and qualification skills: professional competence, qualification skills, intellectual potential, ability for self-perfection;
- the third group – personal features: disciplinary, responsibility, initiativeness, assiduity, physical and intellectual skills, communicativeness, kindness, tactfulness, fairness.

Nowadays the humanity spends most of its time in virtual world – Internet. Databases of partners, suppliers, buyers are conserved in suitable form of informational data medium or in «cloud-access». A sense of the last term refers to achievement of systematized information from any place in the world. The convenience of the service and the available access to Internet-network undoubtedly influence a share of Internet-users all around the world (Figure 2).

Internet-communications for a director creates the possibility to communicate with a large amount of people simultaneously, saving time and financial resources.

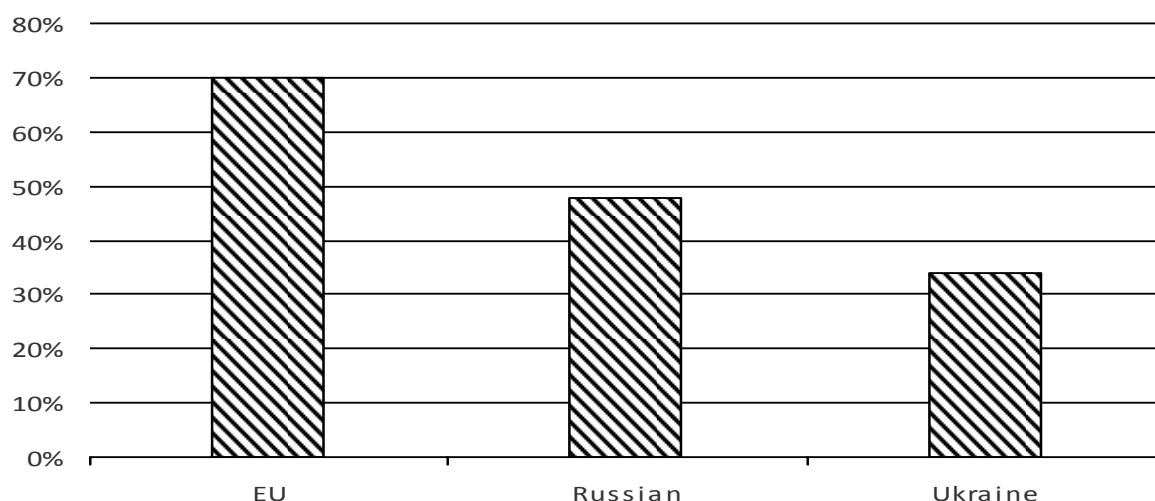


Figure 2. Share of Internet-users in the population (June, 2012)

Source [23].

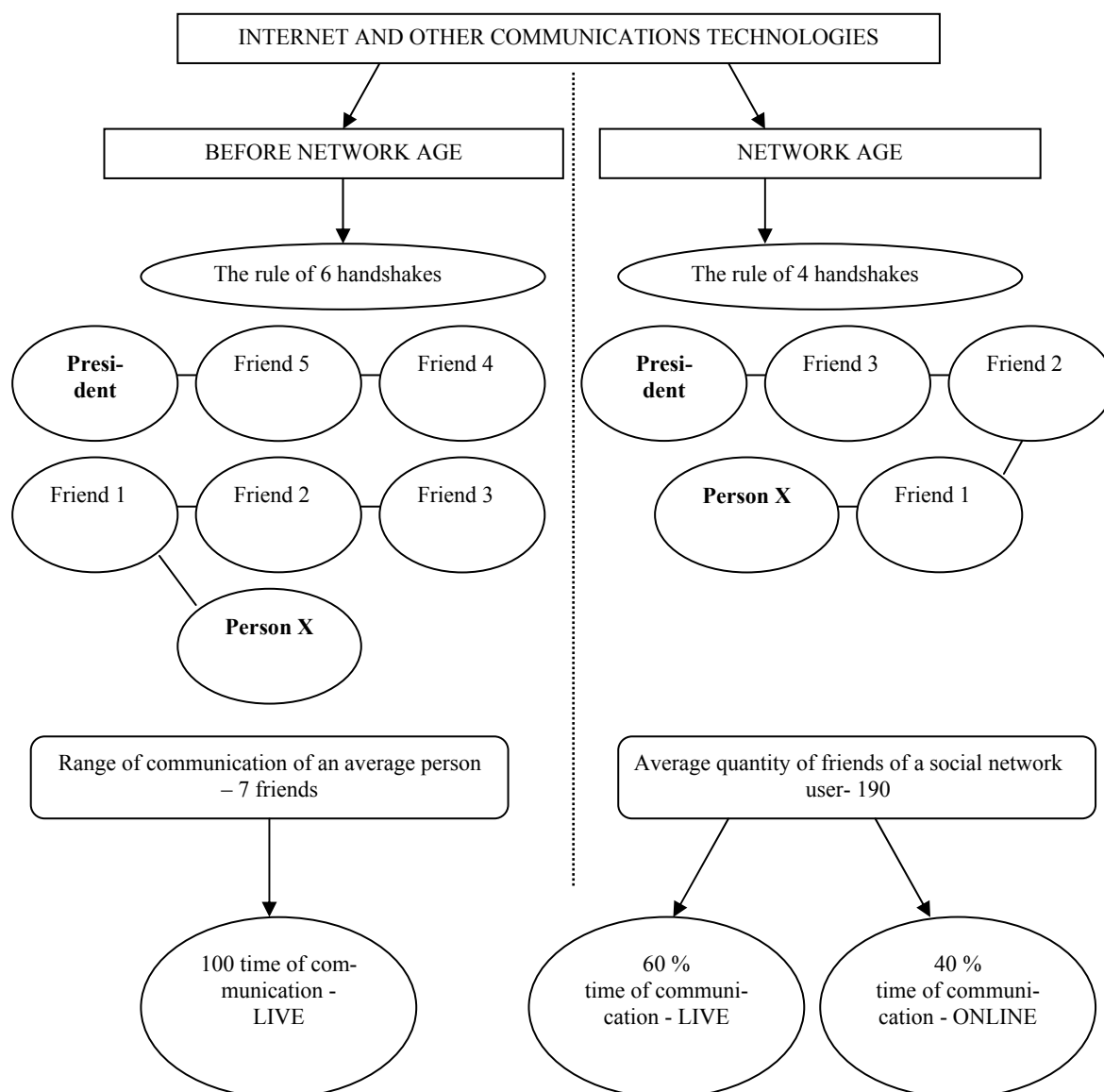


Figure 3. Social communications before and after the network age [24]

The dynamic development of informational technologies draws closer the period of the so-called network age, which will expand communication abilities and improve communication connections of each person (Figure 3).

Considering the previously said, it is possible to suppose that the higher communicative skills of agricultural enterprise director are, the easier he finds necessary counteragents, channels of products marketing and raw materials, which directly influence the profitability of an enterprise.

Confirming the suggested above statements, an American psychologists Stanley Milgram and Geoffrey Travers in 1969 set up the theory of six handshakes, according to which any two persons in the world are separated on average by only five levels of mutual acquaintances (and, accordingly, by six levels of connection) [25]. Thus, each person indirectly acquainted with any other human being through short chain of six persons.

According to Figure 3, nowadays the rule of six handshakes has reduced to four ones, so that we consider as appropriate to research the influence of agricultural enterprise managers on the business activity efficiency and the production profitability.

Research was performed due to a survey of agricultural entity directors. 45 respondents, among which 33% are female and 67% are male, took part in the research. All the respondents are directors of agricultural entities with general area of 120 153 hectares of agricultural fields, most of which are located in Dnipropetrovsk district, while several are from other districts. 55,6% of agricultural entities perform plant growing, 42,2% besides plant growing manage husbandry, and one entity specializes on gardening. General revenue of researched entities equals 1 585 556.2 thousand of hryvnias. A structure of organizational forms of the researched enterprises is as followed: farm entities – 47%, limited liability enterprises – 38%, public stock companies – 2%, agrofirms – 7%, state entities – 4%, private productive firms – 2%.

As agricultural enterprises, which directors took part in research, differ by volumes of production (staff quantity, agricultural fields area etc.), it is required to choose a unified index enabling to perform comparison and level differences. In our opinion, a profit share in the sum of agricultural entity revenue may be implemented as a unified index.

Figure 4 presents the allocation of profit in general revenue of an agricultural enterprise by the gender criterion (Figure 4).

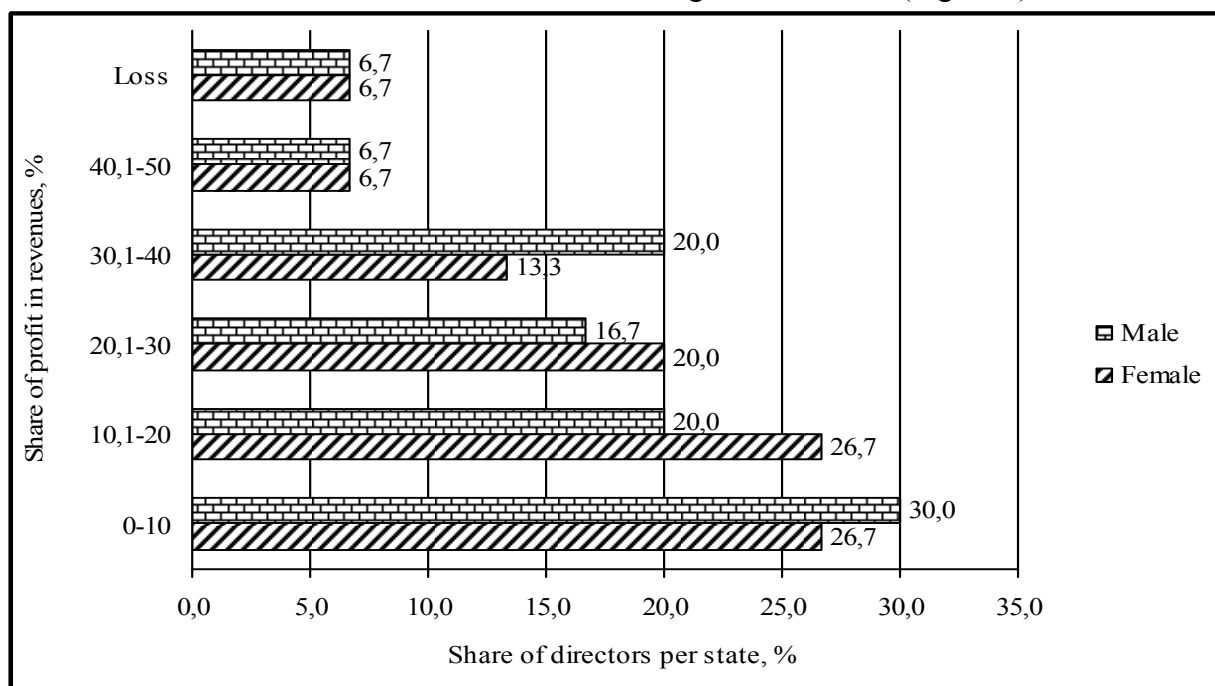


Figure 4. Allocation of the index of profit share in agricultural enterprises revenue by the gender criterion

Source: own research.

According to Figure 4, among agricultural entities with directors both of male and female sex, the share of loss-making and profitable enterprises (40.1-50.0%) is the same and equals 6,7 % for both sexes. At the same time the male sex representatives manage more enterprises with 30.1-40.0% of profit in total revenue.

The presented above results show that up to 30% of profit in enterprise revenue have 73.4% of entities with female directors, and 66.7% - with male directors.

With regard to the fact that the most of researched agricultural enterprises have 20%

share of profit in general revenue, and a deposit interest rate also equals 20%, the question of efficiency of agricultural activity arises. To attain the same result businessmen can place their money at banks on deposited accounts and receive the same profits.

Received during the research results of the intensiveness of appliance of social Internet-networks by agricultural enterprise directors are presented in Figure 5. It is worth mentioning that a single director may be registered in each researched social network.

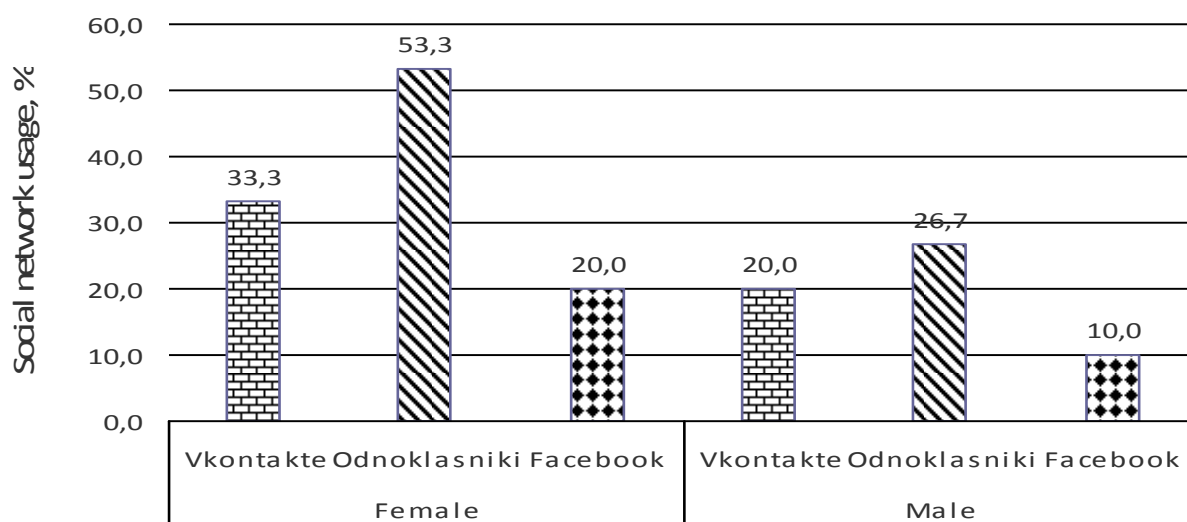


Figure 5. Division of respondents by the criterion of social networks and sex

Source: own research.

According to Figure 5, a share of registered female directors is higher than a share of male ones in all social networks. This enables to make conclusion that the intensiveness of communication does not directly influence the business efficiency, as according to Figure 5 male directors are more successful. «Odnoklassniki» is determined to be the most popular network for both male and female directors, as more than half questioned respondents are members of this social network. Among male directors this index is lower – 26.7 %, nevertheless, «Odnoklassniki» places a leading position for both sexes.

Concerning an educational level of questioned respondents, it is worth mentioning that respondents with high education have the highest share in a structure of agricultural enterprise directors – 73.3%, 17.8% of respondents have secondary special education and only 4.4% are

directors with unfinished high education and a scientific degree. Among questioned respondents only one from each sex has a scientific degree.

In our opinion, communication skills of agricultural enterprise directors are determined by their educational level (Figure 6). This fact is explained by different educational approaches in educational institutions of various accreditation levels.

For instance, directors with secondary special education, who finished technical colleges and colleges and received a junior specialist diploma, were educated by a few lecturers because of limited list of disciplines. Accordingly, those directors, who obtained high education and finished institutions of the III and the IV accreditation level (a university or an academy), had to communicate each quarter or semester with new lecturers, to adjust to new re-

quirements and to acquire new methods of conversation, which significantly improved their communicative skills. Besides, the duration of

study to receive high education is two-three years longer than to receive secondary special education.

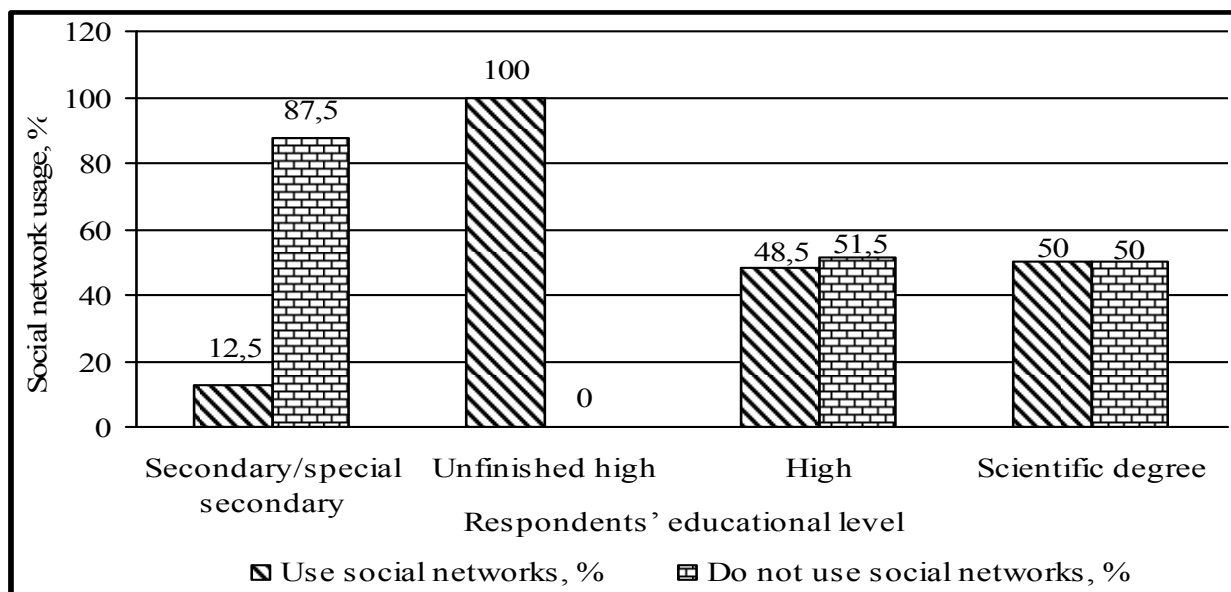


Figure 6. Relation between an educational level and the communication of respondents

Source: own research.

According to Figure 6, 48.5% of high-educated directors of agricultural enterprises use social networks, while 51.5% are not active users. For directors with secondary/secondary special education this index equals 12.5 % and 87.5 % consequently. All directors with unfinished high education are users of social networks. For directors with scientific degree the index has allocated equally – 50% for each group.

A systematic character of knowledges, acquired during the process of educational programmes adoption in educational institutions of the III and the IV accreditation levels enables future professional in the process of solution of certain production problems to implement methods of complex solution, considering current issues of certain enterprise functioning as

well as general tendensions of the scientific and technical progress. Thus, the permanent dynamic integration of science and agricultural entrepreneurship, as a guarantee of development in terms of the postindustrial economy, is ensured [26].

Zinoviev I. F. mentions that in order to increase a knowledge level of a production activity, an amount of high educated workers must vary between 60 and 70% of the staff general quantity [27]. In accordance with this statement, to perform the high productivity of workers at different positions, including managing ones, most of them should have high education. Table 1 represents a share of profit in general revenue of agricultural enterprises according to a directors' educational level.

Table 1

Division of a share of profit in agricultural enterprises revenues according to a director's educational level

Share of profit in enterprise revenues, %	Director's educational level			
	secondary/secondary special	unfinished high	high	scientific degree
Loss	12.5	0.0	6.1	0.0
0-10	50.0	0.0	24.2	50.0
10.1-20	25.0	0.0	21.2	50.0
20.1-30	0.0	50.0	21.2	0.0
30.1-40	0.0	50.0	21.2	0.0
40.1-50	12.5	0.0	6.1	0.0
Разом	100.0	100.0	100.0	100.0

Source: own research.

Considering the data of Table 1, it may be suggested that the most agricultural enterprise directors with secondary/secondary special education manage enterprises with the share of profit in revenues equal 0-10%. For 12.5% of this group of directors the index equals 40.1-50.0%. Thus, directors of this group, compared to other groups, have the highest rate of ineffective management. According to results of the research, the most successful business activity is performed by directors with unfinished high education, but taking into consideration that they

amount for only 2 among 45 respondents, such fact can't be accepted as a relation. In turn, the shares of profitable and loss-making enterprises managed by high educated directors are equal, while the division of enterprises into other groups are almost equal. Such evidence is not observed in any other educational group. Directors with scientific degree have low production efficiency. In our opinion, this fact can be explained by the inadequacy of a representative sample for directors with scientific degree.

Table 2

Division of the share of profit in total revenues of agricultural enterprises according to a number of contacts in a director mobile phone

Profit share in agricultural enterprises revenues, %	Number of contacts in a director mobile phone							
	0-100	101-200	201-300	301-400	401-500	501-600	701-800	1001-1100
0-10	5	4	2	0	0	0	0	2
10.1-20	3	3	2	1	1	0	0	0
20.1-30	0	2	3	1	0	1	1	0
30.1-40	2	2	1	2	1	0	0	0
40.1-50	0	3	0	0	0	0	0	0
Loss	1	1	0	0	0	0	1	0

Source: own research.

The data of Table 2 explain that the number of contacts in a director mobile phone is not a decisive factor of the share of profit in agricultural entity general revenues.

To determine the dependence of researched objective characteristics of enterprise directors, a correlation matrix and a correlation pleiade were built due to the application of the statistical SPSS 17.0 (Statistical Package for the Social Sciences).

Figure 7 explains that the social network usage has an inverse influence on the share of profit in agricultural entity revenues. A time period of the last education improvement determines a fact of usage of social networks exploration as well as a number of friends on social networks, such as Facebook, V Kontakte and Odnoklassniki.

The period of the last education improvement correlates with a director age, in other words, the older a director is, the less considerably he cares about the qualification improvement. It may be interesting that such characteristic as the quantity of friends in social networks and the quantity of children have the inverse correlation, which is explained by obli-

gations to pay more attention to kids and to communicate with friends in real life.

Conclusions. An enterprise director is a significant person in process of an agricultural entity business activity. Nowadays, requirements to firm directors transform dramatically creating demand for managers of a new generation with the following personal features: high professionalism, modern informational technologies, ability for prediction and forecast, adaptation to economic and social progress, communicative skills.

Female directors are more adapted to virtual communications and the connections maintenance. This is proved by a more active social network activity. The inverse relation between the social network usage and the share of profit in general revenue results in the negative influence on the production efficiency of enterprises managed by female directors.

Concerning an agricultural entity director educational level, it is worth mentioning that only a high-educated segment of managers reached the highest level of agricultural entity profitability.

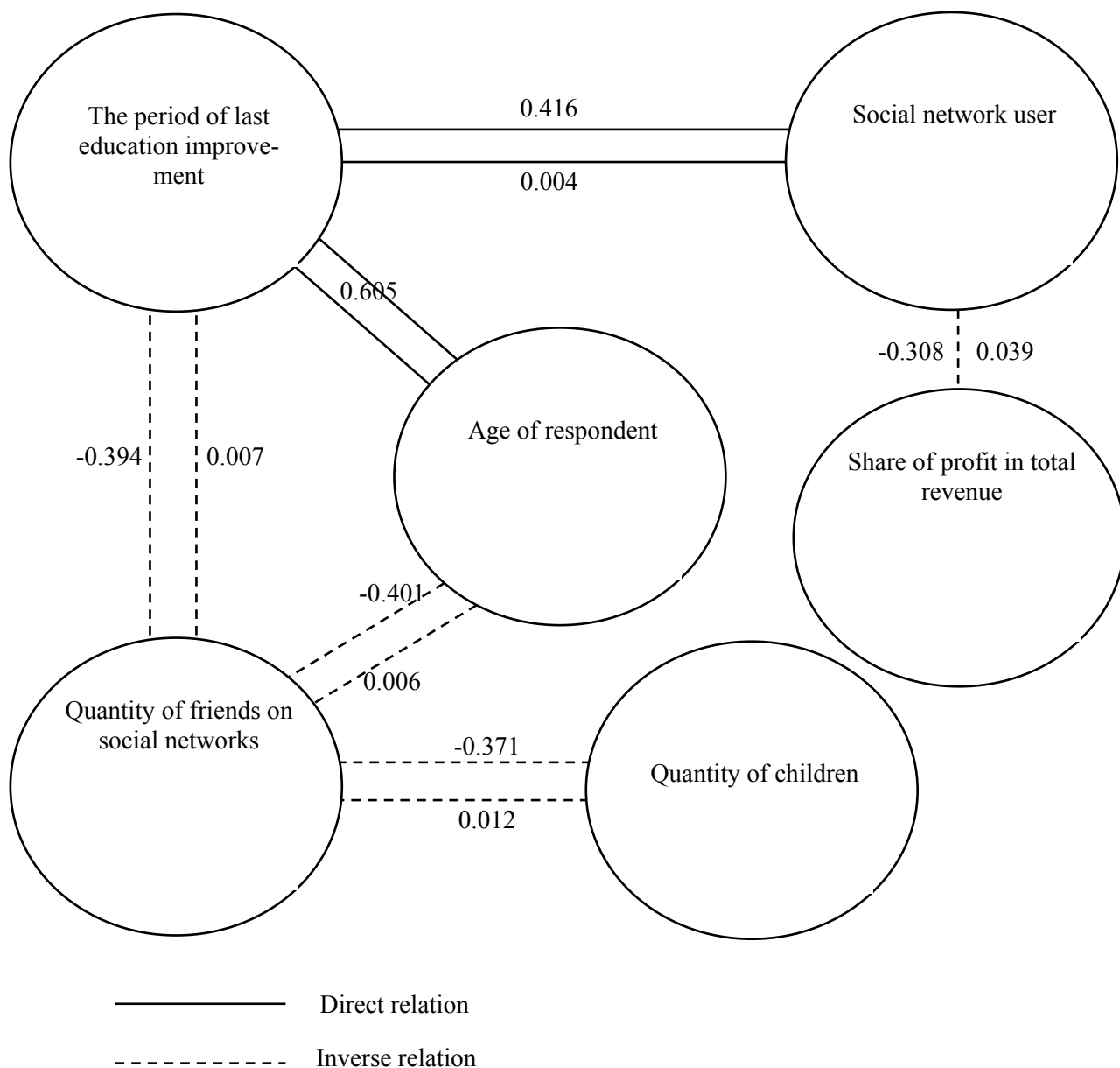


Figure 7. Correlation pleiade of an influence of a level of social network usage dependence and agricultural enterprise activity efficiency

Source: own research.

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Новини АПК

Витрати аграріїв на осінньо-польову кампанію становили понад 48,3 млрд грн

На кінець жовтня 2014 року фактичні витрати коштів сільськогосподарських підприємств на осінньо-польову кампанію перевищили 48,3 млрд грн, що становить 85% від планової потреби. Це на 7,4 млрд грн більше порівняно з відповідною датою минулого року. Збільшення відбулося, переважно, за рахунок подорожчання мінеральних добрив, пально-мастильних матеріалів, запчастин і ремонту техніки, а також засобів захисту рослин.

Власних коштів ними витрачено 44,4 млрд грн (88,6% від потреби). Залучено кредитів на суму 3,8 млрд грн (58% від потреби).

За інформацією з регіонів на початок жовтня цього року 1934 підприємства агропромислового комплексу залучили кредити загальним обсягом понад 8,2 млрд грн, що на 3,1 млрд грн менше, ніж на відповідну дату 2013 року (2330 підприємств, 11,3 млрд грн), у тому числі: 5,7 млрд грн - короткострокові, 1,7 млрд грн – середньострокові та 856,7 млн грн – довгострокові кредити.

Прес-служба Мінагрополітики України