UDC 33 DOI: 10.34670/AR.2020.85.60.022 Structural understanding of the definition of investment analysis

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Abstract

The functional certainty of the market consists in providing it with the processes of selfregulation of the economic system and it performs a regulatory function in the process of continuous reproduction and reliable communication between production and consumption. It is worth noting here that "the main task of regulatory activity is to maintain relations between people, regulate their activities. Connections and relationships between people arise spontaneously in the process of self-organization, so at the initial stage do not require special regulatory institutions." However, as world experience shows, for the effective development of society and solving, along with economic issues, social needs, special forms of regulatory orientation are formed, which causes the creation of appropriate administrative and legal bodies in the form of special organizations, institutions, i.e. institutions that ensure coordination and ordering of various spheres of social relations and social needs. Therefore, today the creation and regulation of the institutional environment belongs to the state, which effectively performs this role and ensures the growth of the national economy and society, or conducts passive work in this direction. It is worth noting that the effectiveness of the state as the main institution in regulating economic processes, including investment processes, depends on the level of public institutions and the professionalism of specialists who lead and work in these institutions. This makes the state dependent on the economic and political situation in General, and in particular "on capital, because there is a direct link between the content and mechanisms of public institutions and the degree of complexity of the economy." Therefore, institutionalization without an appropriate economic base and substantial financial support does not produce significant results.

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Keywords

Development, analysis, structure, dynamics, society.

Introduction

Let's analyze the definition of the terms "investment" and" investment activity "by scientists, scientists and practical economists.

A.P. Duka, the author of the textbook "Theory and practice of investment", activity provides a fairly broad definition of the term "investment". She "understands investments as economic resources that are aimed at increasing the real capital of society, namely: expansion and modernization of production; the creation of the production infrastructure; the creation of inventories and reserves; the creation of social infrastructure; training and retraining of personnel; scientific services, etc."

Gregory Manko in the monograph "Macroeconomics" notes that the term "investment" modern economists give different definitions in essence and content, which leads to ambiguous interpretations by those who are just beginning to study the economy and analyze economic processes at the current stage of economic development.

M.I. Krupka in the monograph "Financial and credit mechanism of innovative development of the economy" gives an example of the fact that depending on the object of investment, investments have a different character. The scientist notes that "in particular, what is an investment for an individual will not be an investment for the economy as a whole." However, according to the macro-economic approach, investment consists of three parts: production investment or investment in fixed assets, investment in housing and investment in inventory, and necessarily creates new capital.

The author of the textbook "Investing: theory and practice" L.M. Borsch believes that " investment is nothing more than the extraction of economic benefits from current consumption and their use in the future, and at the same time as the creation of a reserve."

The scientist also notes that "according to common practice, according to their functional value, investments are divided into three main groups (or types):

- investments in fixed capital (with the allocation of its active part technological equipment, machines, machines, devices, etc., and passive
- buildings, structures, transport infrastructure, etc);
- investment in housing construction;
- investments in raw materials and finished goods stocks".

In our opinion, this is a fairly generalized definition of the term "investment", and it does not reflect the current development of the national economy and social production, as well as the innovative development of the state in the conditions of market relations.

Main part

A.I. Kovtun, the author of the domestic publication, shares the directions of investment of own capital:

- current and fixed capital invested in current (current) and non-current (long-term) assets of the enterprise for the purpose of modernization, reconstruction of production and introduction of new technologies;
- capital invested in long-term investments, mainly in other objects, for the purpose of obtaining

additional profit or achieving a social effect.

So, an investment is an investment of capital today for the purpose of its subsequent growth, that is, an increase in the future. The capital gain resulting from its investment is a corresponding compensation for the possible risks of losing the invested funds and not receiving the expected profit. The source of capital growth in the investment process is the profit that the investor receives from the invested funds. These processes-the investment of capital and the receipt of the corresponding projected profit-take place at a certain time in the investment project, namely:

- investment of funds, and only subsequently make a profit;
- parallel investment of funds and making a profit;
- investment in certain periods, and get a profit after the implementation of the investment project.

In turn, A.I. Kovtun, the author of the educational publication, believes that investment activity is the process of investment, that is, the investment of the above-mentioned values in business and social infrastructure, and the main types of investment activities for investment objects are real, financial and intellectual investments.

Author G.V. Savitskaya in the publication "Economic analysis of business activities" gives a definition of the term "investment" as "long-term investment in the assets of the company to expand operations, increase profits, competitiveness and market stability".

In addition, in our opinion, investment contributes to the modernization of production processes, the introduction of the latest technologies and high-performance equipment: automatic lines, machines with numerical software, mechanisms and automatic machines that facilitate or completely replace manual labor.

According to the objects of investment resources in domestic production and production processes, in connection with the above-mentioned publication, the author G. V. Savitskaya divides them into real and financial:

- real is an investment in updating the material and technical base of the enterprise; increasing production capacity; development of new types of products; introduction of new technologies; innovations; construction of housing, social facilities; expenditures on facilities that improve the environment; costs for creating production and social infrastructure;
- financial investments are long-term financial investments in securities (shares, bonds, certificates, promissory notes, etc.); in joint ventures that provide guaranteed income, and so on.

The author of the above-mentioned publication, like other authors, does not single out "intellectual investments" in a separate category, obviously meaning that this type of investment refers to financial investments. Although at the current stage of economic development, more and more funds are being invested in scientific research and the introduction of information technologies.

French economist P. Masset in the work "Criteria and methods of optimal definition of investment" defines investment as an investment of capital. American scientists S. Fischer, G. Dornbush and R. Schmalenzi in the publication" Economics " provide such a definition of the term "investment" (investment expenses) – it is the cost of creating new capacities for the production of machinery, financing housing, industrial or agricultural construction, as well as reserves [Jafarizadeh, Bratvold, 2009].

In our opinion, the Nobel prize winner J. M. Keynes gave a fairly broad definition of the term "investment", which means "investment"...the current increase in the value of capital assets as a result of the production activity of this period"..., "that part of the income for a certain period that was not used for consumption".

It is worth noting that the above definition of the term "investment" most clearly reveals the

essential characteristics of investments, their effectiveness and, first, reflects the volume of accumulated income for the purpose of accumulation, the amount of investment resources, that is, the potential investment need for effective economic development, and secondly, notes that investments that act in the form of investments determine the increase in the value of capital assets, that is, provide appropriate resources for both investment demand and investment supply.

However, it is worth noting that investments that are invested in the real sector of the national economy lead not only to profit, but also provide various other (economic, energy security, etc.) effects, including the social effect, as well as the development of social infrastructure, that is, effective investment of the national economy leads to significant economic growth, which is "one of the most important social problems, which is constantly focused on by economists and politicians [Tan, Liu, Zhang, 2009].

It is the rate of economic growth that determines the dynamics of the country's economic development, its authority in the international arena and historical prospects," and especially the standard of living and well-being of the country's citizens (population).

According to some domestic and foreign scientists and economic practitioners, there is another rather important form of investment – "financial rights", which are based on the relationship of investment activities of investment entities and state institutions that regulate its conditions. This form is implemented by providing the state, represented by some institutions of Central or local authorities, to business entities tax benefits, that is, real investment of state funds in the development of business structures. At the same time, it is necessary to build a fairly balanced investment policy that would include the definition of the investor's goal and the amount of funds invested, since there is a direct link between risk and return for national investment strategies."

It is worth noting that in this situation, the desire to get significant profits can be quite likely to lead to large costs. So, investment goals should take into account both returns and risk. In this case, the investor's investment activity should take into account, among other considerations, the purpose (purpose) of investment, the amount of funds invested and the status of the investor as a taxpayer who has or does not have tax benefits.

It is worth noting that the term "investment" as an economic category, as already mentioned above, entered domestic scientific publications and practice in the late 80's of the twentieth century, when the market transformation of society began, and at first many scientists-economists, scientists and practitioners in economic research mistakenly identified with capital investment. During the transition of the domestic economy to market relations, considerable attention was paid to the clarification of the economic and especially financial essence of investments, but even now this term has not been given a universal, clear, understandable definition that everyone would interpret unambiguously and that would meet the needs of economic theory and practice [Straka, Bullard, 2009].

An attempt to fully define the essence of investment is made in The law "on investment activity", which, in addition to the term "investment", also provides definitions of other terms that characterize the activities, processes, objects and subjects of the investment market, namely: investment activity, objects and subjects of investment activity, investors, participants in investment activity, investment cycle, investment process, investment environment, investment complex [Ghisi, Tavares, Rocha, 2009].

In the economic practice related to the investment process of business entities, almost one hundred terms describing various types of investment are used. Therefore, in order to ensure effective and purposeful investment management and regulation of investment activities, we systematize and classify investments according to the main characteristics, namely: by investment objects and forms of ownership of capital, the period of implementation, the level of investment risk, sources and direction

of capital, and so on [Selby, 2009].

Based on our analysis, we believe that investments are widely used and are used to Finance both the expansion of production and the financing of investment processes.

Practical implementation (use) of investment resources (deposits) by investment entities occurs in the following areas: capital construction, creation of industrial and social infrastructure, introduction of innovations, and others [Gong., Pei, Wang, 2010].

So, as you can see, the activation of investment activity is a significant and effective mechanism for socio-economic transformations in the economic space, both at the regional and national levels. Investments in the spatial development of the national economy perform the main functions of ensuring progressive structural changes in the domestic economy, implementing innovative processes and improving the efficiency of production processes [Jafarizadeh, Bratvold, 2009].

Based on the interpretation of the term "investment" by the authors of various scientific publications and publications, it is safe to say that this concept is interpreted either equally or too narrowly and not always unambiguously. It is typical in all formulations of this term that an investment is understood as any investment, even one that does not lead to capital growth and profit.

According to the economic content of investment, as L. B. Borsch, the author of the manual "investing: theory and practice", believes, it is part of the resources of society that are withdrawn from current consumption and invested in production or the social sphere in order to obtain future income, the introduction of various kinds of innovations, obtaining social benefits in the future, improving the welfare of citizens, that is, in this sense, investment is deferred consumption [Zhang, 2009].

The investment process has two main objectives: to ensure the replacement of worn-out means of production and to create new opportunities for growth and increase of real wealth. For example, Paul A. Samuelson and William D. Nordhaus believe that " investment (or capital investment) consists of the capital added during the year to the national capital-buildings, equipment, and inventory. Investment means giving up current consumption in order to increase future consumption" [Liu, Yan, 2009].

These same scientists claim that "in real life, countries give part of their product to the production of investment goods. ...For economists, investment always means real capital investment, i.e. the production of industrial goods."

So, we can generalize the scientific approaches of domestic and foreign scientists, researchers and practical economists to the definition of the essence of investment, which consists in long-term and capital investments, monetary, property and intellectual values, as well as in the flow of expenditures intended for production.

Implementation of investments is ensured by the most effective actions of various types of institutions, institutions, organizations, enterprises of both state and non-state ownership forms.

In the process of implementing this goal, investment activities should be aimed at solving the main tasks of national economic development, such as:

- identification of ways to accelerate the implementation of investment and innovation programs and projects;
- achieving high rates of economic and social development of society; production; infrastructure of both production and social orientation;
- achieving maximum income (profit) at minimum cost, that is, ensuring maximum efficiency of investment;
- ensuring financial stability and solvency of investment objects in the course of investment activity;
- ensuring minimum investment risks in the course of investment activities, thereby achieving

additional income from the investment.

These tasks of investment activity are closely interrelated and directly affect both ensuring the maximum amount of income (profit) and achieving high rates of economic and social development of the society. In turn, achieving maximum returns leads to an increase in the level of investment risks. Therefore, these two indicators should be optimized to ensure the appropriate return on investment and minimize losses. In accordance with the purpose, investment activities are based on the use of various types of investment sources [Esteves, 2008].

In practice, the largest amounts of investment are invested in the real sector of the national economy by citizens of the Russian Federation, business entities of non-state ownership and banking institutions [Zoric, Paulsen, Brummenæs, 2010].

So, in any case, investment is the future technical and technological basis for further economic development of the country, modernization of production processes and production efficiency, a condition for economic growth.

Practical implementation of investments is provided by investment activity (investment), which is one of the most important types of economic activity of business entities and the most important form of realization of their economic interests [Klingelhöfer, 2009].

The Law of the Russian Federation "on investment activity", which is discussed above, provides an interpretation of investment activity as a set of practical actions of citizens, legal entities and the state aimed at implementing investment programs in order to generate income or profit." The Law sets out the forms of investment activity in the field of innovation, that is, in the field of introduction of scientific and technical achievements in production, production processes, technologies and industrial and social infrastructure, as well as new types of equipment [An, Tian, Zhao, 2009].

However, the term "investment activity" has a broad meaning, since it includes such processes as: search for investment resources; selection of investment objects that would give a significant return, that is, would be effective; formation of an investment program, analysis of an investment project and formation of an investment portfolio; investment implementation.

Considering the range of subjects of investment activity, we observe that if earlier the main investors were the state, enterprises(production) and banks, now there are fundamentally new participants (institutions): insurance, investment, financial companies, pension and investment funds, concerns, consortia, industrial and financial groups, and other financial institutions. Such significant changes in the formation of investment resources by various financial institutions require a balanced state influence on the formation and effective use of investment resources by all participants in the investment process, which, of course, requires effective regulation by state authorities.

And regulation of the investment process and investment management should be based on a balanced investment policies and the development of a constructive strategy of development of basic sectors of the domestic economy and certain industries, their investment support. In turn, the strategy of investment development of the national economy should be one of the components of the national strategy of socio-economic development of the country, taking into account the conditions of the transition period and ensuring gradual economic growth.

Of course, the strategy of economic reforms in each country is based on the peculiarities of its historical development, the specific economic and social situation, political situation, financial opportunities and possibilities of attracting external resources, the availability of natural resources and the like [Kowli, Gross, 2009].

Strategic reform of the domestic economy should include the following main interrelated tasks: first, to carry out systemic changes in the economy, including institutional and structural changes that would be most consistent with the consistent and purposeful development of society; second – to ensure

the liberalization of the economy, while guaranteeing the reduction of state functions and strengthening the functional impact of non-state institutions on the development of the economy; the third is to ensure financial macroeconomic stabilization based on a strict policy of budgetary, penny-credit relations, exchange rates, wages, and so on.

Based on a thorough analysis of the essence and meaning of the terms "investment" and "investment activity", which are submitted by domestic and foreign scientists-economists, scientists and economists-practitioners, you can formulate your definition of these definitions [Buck, Das, Hanf, 2008].

Conclusion

So, in our opinion, investment is a set of property and financial resources and intellectual values that are invested in their own production for the purpose of its reconstruction, modernization and introduction of new technologies, in other objects of business entities and the social sphere in order to make a profit, as well as innovation. And investment activity is the process of implementing investments, that is, the investment of material, financial resources and intellectual values in the objects of the economy and social sphere.

The development of the modern domestic investment market, especially the interaction of state bodies and business entities in it, indicates that the system of state regulation in the national economy does not meet international standards and the needs of the domestic economy, and therefore the system of state regulation of the investment market requires urgent effective and radical changes, as well as improving the institutional framework for the formation and development of the investment market and investment activities.

The institutional foundations for the formation and development of the investment market and investment activity are very important in economic practice, especially during the transition from an administrative-command economy to market relations. After all, it is during this period, the transition to a market economy, that deep socio-economic changes, changes in the financial and industrial spheres take place.

A characteristic feature of market economy is the mobility of material, labor, financial and other resources. And each entrepreneur can at his own discretion invest and move his capital from one production to another, from one industry to another, from one sphere of the economy to another, based on his own economic interests.

Market relations of both production and financial nature arise on the basis of the right to engage in any type of business, organize it at their own discretion, expand or terminate activities at their own will. This is what characterizes the market and is its objective condition for existence.

References

^{1.} An S., Tian J.-Y., Zhao Z.-B. (2009) Option-game analysis in R & amp; D investment under uncertainty and competition. Shenzhen Daxue Xuebao (Ligong Ban). *Journal of Shenzhen University Science and Engineering*, 26(1), pp. 102-105.

^{2.} Buck K., Das P., Hanf D. (2008) Applying ROI analysis to support SOA information security investment decisions. In: 2008 IEEE International Conference on Technologies for Homeland Security, HST'08, pp. 359-366.

^{3.} Esteves A.M. (2008) Evaluating community investments in the mining sector using multi-criteria decision analysis to integrate SIA with business planning. *Environmental Impact Assessment Review*, 28(4-5), pp. 338-348.

Ghisi E., Tavares D.D.F., Rocha V.L. (2009) Rainwater harvesting in petrol stations in Brasília: Potential for potable water savings and investment feasibility analysis. *Resources, Conservation and Recycling*, 54(2), pp.79-85.

^{5.} Gong X., Pei J., Wang Y. (2010) The analysis and design of WAP-based mobile banking fund investment analysis software. In: *ICCASM 2010 – 2010 International Conference on Computer Application and System Modeling, Proceedings*, 9, pp. 9451-9455.

- 6. Jafarizadeh B., Bratvold R.B. (2009) Real options analysis in petroleum exploration and production: A new paradigm in investment analysis. In: Society of Petroleum Engineers EUROPEC/EAGE Conference and Exhibition 2009.
- Jafarizadeh B., Bratvold R.B. (2009) Real options analysis in petroleum exploration and production: A new paradigm in investment analysis. In: 71st European Association of Geoscientists and Engineers Conference and Exhibition 2009: Balancing Global Resources. Incorporating SPE EUROPEC 2009, 6, pp. 3460-3469.
- 8. Klingelhöfer H.E. (2009) Investments in EOP-technologies and emissions trading Results from a linear programming approach and sensitivity analysis. *European Journal of Operational Research*, 196(1), pp. 370-383.
- Kowli A.S., Gross G. (2009) Incorporation of demand response resources in resource investment analysis. In: 2009 IEEE Bucharest Power Tech: Innovative Ideas Toward the Electrical Grid of the Future. Available at: https://doi.org/10.1109/PTC.2009.5282141 [Accessed 13/05/2020].
- Liu J.-L., Yan X.-B. (2009) A commercial real estate investment analysis from CBR approach. In: 2009 International Conference on Management Science and Engineering – 16th Annual Conference Proceedings, ICMSE 2009, pp. 1921-1927. Available at https://doi.org/10.1109/ICMSE.2009.5317745 [Accessed 13/05/2020].
- 11. Selby R.W. (2009) Enabling economics-driven system development through return-on-investment analysis of software defect prevention. In: 47th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition.
- 12. Straka T.J., Bullard S.H. (2009) FORVAL: Computer software package for agricultural and natural resources investment analysis. *Journal of Extension*, 47(2).
- Tan W., Liu H., Zhang W. (2009) Real option model application and sensitivity analysis in mineral resources investment project. In: 2009 International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2009, 4, pp. 200-203.
- 14. Zhang X. (2009) Private equity investment projects selection base on grey relational analysis. In: 3rd International Symposium on Intelligent Information Technology Application, IITA 2009, 1, pp. 441-444.
- 15. Zoric J., Paulsen C.M., Brummenæs M. (2010) Incorporating the effects of business environment in investment analyses of service platforms. In: 2010 14th Int. Conference on Intelligence in Next Generation Networks: "Weaving Applications Into the Network Fabric", ICIN 2010 2nd Int. Workshop on Business Models for Mobile Platforms, BMMP 10.

Структурное понимание определения инвестиционного анализа

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Аннотация

Функциональная определенность рынка состоит в том, что он обеспечивает процессы саморегулирования экономической системы и выполняет регулирующую функцию в процессе непрерывного воспроизводства и надежной связи между производством и потреблением. Основной задачей регуляторной деятельности является поддержание

отношений между людьми, регулирование их деятельности. Связи и отношения между людьми возникают спонтанно в процессе самоорганизации, поэтому на начальном этапе не требуют специальных регулирующих институтов. Однако, как показывает мировой опыт, для эффективного развития общества и обеспечения социальных потребностей формируются особые формы нормативной направленности, что обуславливает создание соответствующих административно-правовых органов в виде специальных организаций, институтов, т.е. институтов, обеспечивающих координацию и упорядочение различных сфер общественных отношений и общественных потребностей. Поэтому сегодня создание и регулирование институциональной среды принадлежит государству, которое эффективно выполняет эту роль и обеспечивает рост национальной экономики и общества либо ведет пассивную работу в этом направлении. Стоит отметить, что эффективность государства как основного института регулирования экономических процессов, в том числе инвестиционных, зависит от уровня государственных институтов и профессионализма специалистов, которые руководят и работают в этих институтах. Это делает государство зависимым от экономической и политической ситуации в целом, и в частности «от капитала», поскольку существует прямая связь между содержанием и механизмами государственных институтов и степенью сложности экономики. Поэтому институционализация без соответствующей экономической базы и существенной финансовой поддержки не дает существенных результатов.

Для цитирования в научных исследованиях

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Ключевые слова

Развитие, анализ, структура, динамика, общество.

Библиография

- An S., Tian J.-Y., Zhao Z.-B. Option-game analysis in R & amp; D investment under uncertainty and competition. Shenzhen Daxue Xuebao (Ligong Ban) // Journal of Shenzhen University Science and Engineering. 2009. No. 26(1). P. 102-105.
- Buck K., Das P., Hanf D. Applying ROI analysis to support SOA information security investment decisions // 2008 IEEE International Conference on Technologies for Homeland Security, HST'08. 2008. P. 359-366.
- 3. Esteves A.M. Evaluating community investments in the mining sector using multi-criteria decision analysis to integrate SIA with business planning // Environmental Impact Assessment Review. 2008. No. 28(4-5). P. 338-348.
- 4. Ghisi E., Tavares D.D.F., Rocha V.L. Rainwater harvesting in petrol stations in Brasília: Potential for potable water savings and investment feasibility analysis // Resources, Conservation and Recycling. 2009. No. 54(2). P.79-85.
- Gong X., Pei J., Wang Y. The analysis and design of WAP-based mobile banking fund investment analysis software // ICCASM 2010 – 2010 International Conference on Computer Application and System Modeling, Proceeding. 2010. No. 9. P. 9451-9455.
- 6. Jafarizadeh B., Bratvold R.B. Real options analysis in petroleum exploration and production: A new paradigm in investment analysis // Society of Petroleum Engineers EUROPEC/EAGE Conference and Exhibition 2009. 2009.
- Jafarizadeh B., Bratvold R.B. Real options analysis in petroleum exploration and production: A new paradigm in investment analysis // 71st European Association of Geoscientists and Engineers Conference and Exhibition 2009: Balancing Global Resources. Incorporating SPE EUROPEC 2009. 2009. No. 6. P. 3460-3469.
- 8. Klingelhöfer H.E. Investments in EOP-technologies and emissions trading Results from a linear programming approach and sensitivity analysis // European Journal of Operational Research. 2009. No. 196(1). P. 370-383.
- 9. Kowli A.S., Gross G. Incorporation of demand response resources in resource investment analysis // 2009 IEEE Bucharest Power Tech: Innovative Ideas Toward the Electrical Grid of the Future2009. Available at:

https://doi.org/10.1109/PTC.2009.5282141 [Accessed 13/05/2020].

- Liu J.-L., Yan X.-B. A commercial real estate investment analysis from CBR approach2009 // 2009 International Conference on Management Science and Engineering – 16th Annual Conference Proceedings, ICMSE 2009. P. 1921-1927. Available at https://doi.org/10.1109/ICMSE.2009.5317745 [Accessed 13/05/2020].
- 11. Selby R.W. Enabling economics-driven system development through return-on-investment analysis of software defect prevention. 2009 // 47th AIAA Aerospace Sciences Meeting including the New Horizons Forum and Aerospace Exposition.
- 12. Straka T.J., Bullard S.H. FORVAL: Computer software package for agricultural and natural resources investment analysis // Journal of Extension, 200947(2).
- Tan W., Liu H., Zhang W. Real option model application and sensitivity analysis in mineral resources investment project // 2009 International Conference on Information Management, Innovation Management and Industrial Engineering, ICIII 2009. 2009. No. 4. P. 200-203.
- 14. Zhang X. Private equity investment projects selection base on grey relational analysis // 3rd International Symposium on Intelligent Information Technology Application, IITA 2009, 2009. No. 1, P. 441-444.
- Zoric J., Paulsen C.M., Brummenæs M. Incorporating the effects of business environment in investment analyses of service platforms2010 // 2010 14th Int. Conference on Intelligence in Next Generation Networks: "Weaving Applications Into the Network Fabric"", ICIN 2010 – 2nd Int. Workshop on Business Models for Mobile Platforms, BMMP 10.