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INVESTMENTS & INNOVATIONS PROJECT AT AN INDUSTRIAL ENTERPRISE: PECULIARITIES, ROLE AND LIFE CYCLE

О.С. Балан, Н.О. Парь'ева. Особенности, роль та життєвий цикл інвестиційно-інноваційного проекту на промисловому підприємстві. Досліджено сучасний стан інвестиційно-інноваційної діяльності промислових підприємств, розроблено пропозиції щодо життєвого циклу інвестиційно-інноваційного проекту.

Ключові слова: інновації, інноваційна діяльність, промислові підприємства, інвестиційно-інноваційний проект, життєвий цикл інвестиційно-інноваційного проекту.

A.S. Balan, N.A. Par'eva. Особенности, роль и жизненный цикл инвестиционно-инновационного проекта на промышленном предприятии. Исследовано современное состояние инвестиционно-инновационной деятельности промышленных предприятий, разработаны предложения по жизненному циклу инвестиционно-инновационного проекта.

Ключевые слова: инновации, инновационная деятельность, промышленные предприятия, инвестиционно-инновационный проект, жизненный цикл инвестиционно-инновационного проекта.

A.S. Balan N.A. Par'eva. Investments & innovations project at an industrial enterprise: peculiarities, role and life cycle. Researched is the contemporary condition of industrial enterprises' investment & innovations-related activity, elaborated and suggested is the conceptual categorisation of the industrial enterprise's investment & innovations project life cycle stages.

Keywords: innovations, innovative activity, industrial enterprises, investments & innovations project, investment & innovations project life cycle.

Introduction to the problem. Under contemporary economical conditions the industrial enterprises' efficient operation and further development are inseparably linked to their innovation and investments — related activity. The latest decade statistical data do clearly witness a deep crisis of the industrial entities' innovative activity resulting from low stability of their environment as well as from the problems with investments engaging. Therefore a primordial priority in that sphere is tribute to some actual steps aimed at difficulties' over-passing and innovative activity stipulation.

The Ukrainian enterprises' investments & innovations activity characteristic features relate to a given degree of structural distortion; the technological, economical and social values-related aspects' institutional incompleteness, inconsistency and lack of mutual balance [1].

The Ukrainian economics integration into global economy, special emphasis herein being made onto processes of WTO integration, does evidently imply the domestic industry facing the perspectives of severe competition with the foreign manufacturers [2].

The innovations' implementation factor is used as a parameter countable in the national scale of every country. The index represents a profit percent assigned for industry modernisation and new technologies' introduction. The factor below 15 % evidences the production potential degradation and destruction up to collapse; even the equipment used and buildings having a lifespan of dozens and dozens years, such a diminished index of investments into innovative progress, the enterprise is incurably failing. Most of Ukrainian enterprises are found within critical risk area, the average innovations implantation index never exceeding 5 % that involved the collapse of numerous industrial entities, such dangerous trend still being not worn down.

One of the main barriers hindering the industry innovative development consists in lack of financial resources for scientific research in the field and the innovative developments implantation. De facto the budget share assigned for the science when expressed as GDP percentage, lasts below the respective percent recommended by the legal norm (1,7...2,5 % of GDP) [2].

Therefore the investments & innovations – related process' progress obtains top priority for the domestic industry. Herein identified is a special importance of investigating and analyzing the peculiarities of investments and innovations implemented by the industrial enterprises as particularly, the I&I project life cycle stages and specificity.

Problem formulation and links to the key scientific and practical tasks in the field. Today the need for correct structure identification and practical implementation of I&I projects aimed at an enterprise's stable development and its product competitiveness is of high actuality. That problem effective resolving requires studying the I&I project peculiarities as well as identifying the enterprise's I&I progress hindering factors. Most entities that have succeeded in finding investments for innovations creation or introduction even do not consider the project realisation and functioning problems. Meanwhile an I&I project should be considered as a process having a specific life cycle which includes several stages, therefore the efficient management of I&I process does impose essential investments into scientific research, innovations' creation and commercialisation.

Analysis of latest research and publications in the problematic field. General problem particular aspects the given study is devoted. The innovative development questions have been closely sought by such scientists [1, 3, 4]. All of them do evolve several reasons hindering separate innovative activity development aspects, like: deficiency in proper finance assets, low investments-innovative potential, lack in governmental financial support, political instability, lack in legal and normative instruments, regulating and stipulating the investments and innovative activity, technological market poor development level etc. Nevertheless none of the authors is ever considering the investments and innovative activity as the realization of an investments project becoming an innovative one under circumstances when the project goal relates to innovations' practical implementation into production process (either bought innovations or those developed by the enterprise). Apart of such external hindrances, there exists a group of internal problems pending to be solved for the I&I project realisation and operation. Such projects efficient operation requires to indentify the components of I&I project implementation life cycle.

Exposed research task formulation. This study goal represents formalisation the I&I project life cycle stages' terminology, at the same time revealing the prospects for further investigation into the industrial enterprises' investments & innovations – related activity restraints elimination.

Researched topic details with scientific issues substantiated. According to the “Innovative activity” Law of Ukraine, the innovations represent some newly created (applied) and/or improved efficiently competitive technologies, products or services as well as the organisational and technical solutions in the production, administrative, commercial etc. spheres, essentially improving the manufacturing production (and/or the social sphere) structure and quality [5].

The innovative activity can be exposed as one of the economical legal forms of investments-related activity, whose realisation is directed onto embodying the scientific technological progress' issues into production manufacturing and the social sphere with the goal of reaching a given social economical effect, including the principally new techniques and technologies generation and distribution, the progressive structural challenges at the cross-industries sector, qualitative changes in the productive forces' content, improving the social and ecological environment, new products manufacturing and services providing etc.

The main feature of I&I activity relates to the innovations created either applied while this activity running. In such a way the I&I project life cycle will one stage — exceed the purely innovative project's life cycle [6].

We suggest to divide the I&I Project's life cycle (LC) into 5 stages (fig. 1, 2):

- 1 — Preinvestment-innovative stage;
- 2 — Innovations stage;

- 3 — Investments stage;
4 — Operational stage
5 — Closing stage.

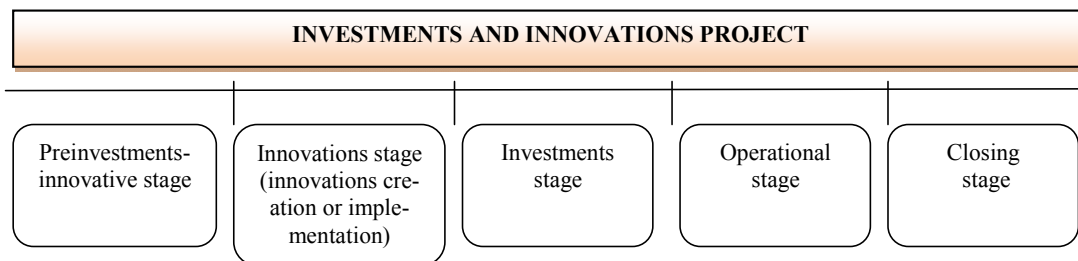


Fig. 1. Stages of I&I project life cycle

The first, preinvestment-innovative, stage includes the project idea generation, verification of project idea feasibility, completion of technical design assignment, business plan elaboration, search of investments required for I&I project implementation.

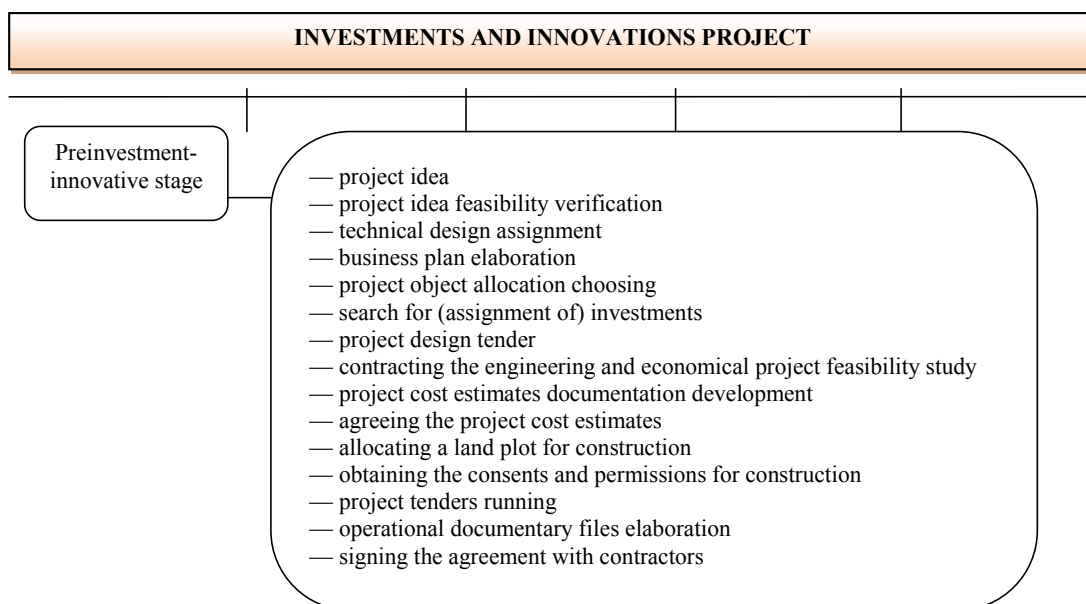


Fig. 2. Structure of I&I Project life cycle preinvestment-innovative stage

The next, innovative, stage has essential effects onto the project implementation terms. The enterprise taking a decision about buying some innovations for improvement of manufactured product quality, this stage will consist in seeking the convenient innovations and buying the respective property rights to use them. But when the enterprise opts to create/elaborate the own innovation, this stage challenges to include several iterations:

— Creating the innovations: elaborating scientific researches and developments, preparing the designer and technological documents.

— Implementing the innovations: having succeed at this phase, id.e. the innovation efficiently passing the initial tests, there are created all backgrounds for the next, third phase, namely: the innovations' commercialisation and effective use. This last phase predetermines the production and sales volumes, as well as the profit amounts (Fig. 3).

Every project realisation does imply involving the necessary investments. The investments stage is specific with such phases: identifying and establishing the legal, financial and organisational project grounds; staff selection and training; commissioning into operation and launching (Fig. 4).

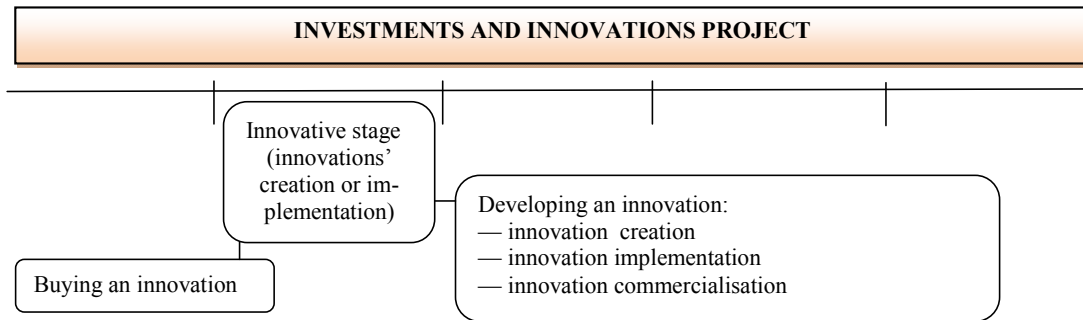


Fig. 3. I&I Project life cycle innovative stage structure

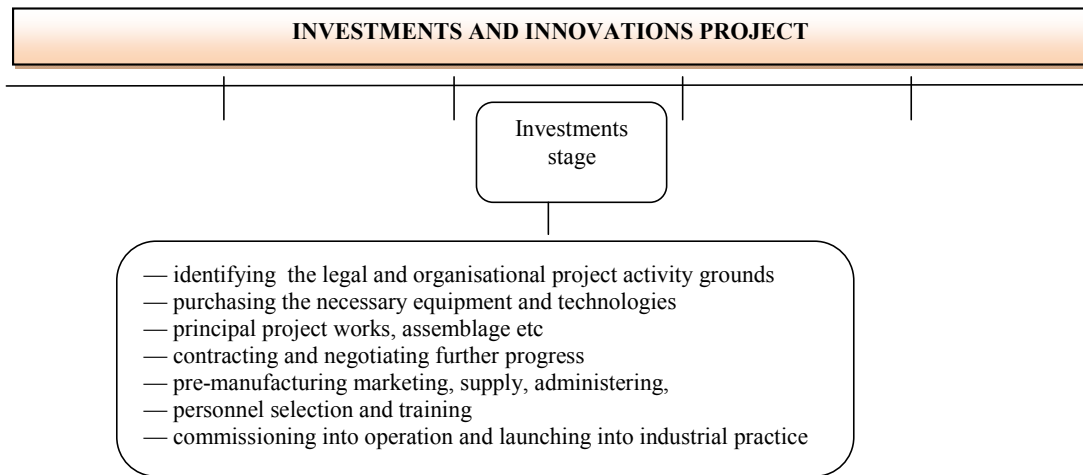


Fig. 4. I&I Project life cycle investments stage structure

The operational stage phases are: product manufacturing and commercialisation, project feasibility, return and risks monitoring, product and industrial manufacturing certification, service network creation, dealing network creation, on-flow monitoring of the project economical characteristics (Fig. 5).

The project closing stage usually refers to a procedure of existing project termination, meanwhile, potentially this stage could serve for another project development initiation [5]. This last, I&I project closing stage includes such phases as: reselling the project, project re-profiling or closing properly said.

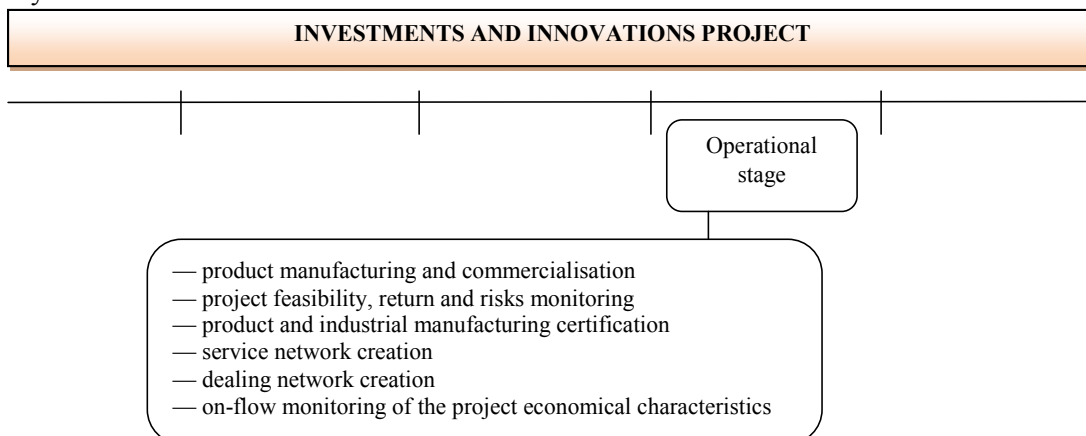


Fig. 5. I&I Project life cycle operational stage structure

Such a decision can result from the investing entity's changed plans, from the lack of project budget, from the erroneous calculations, from alternative projects revealing etc. Essential is that the probable occurrence of project renewal being forecasted, the closing procedure should include some tools for preparing the future renewal of the project organisational structure and the project works restarting (Fig. 6).

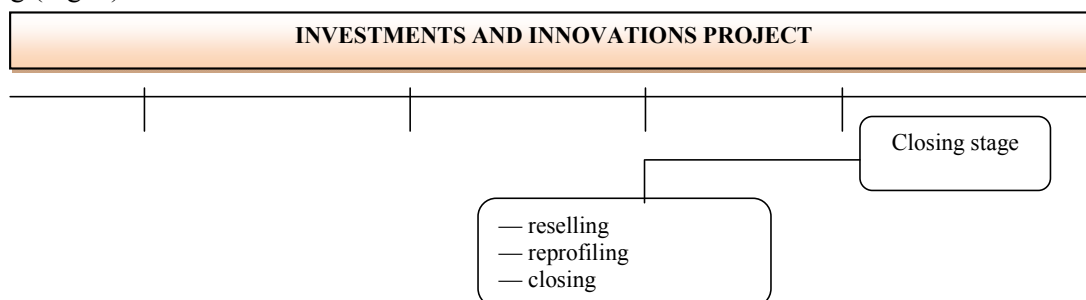


Fig. 6. I&I Project life cycle closing stage structure

The machine building industry enterprises' structure traditionally includes several specialised sub-entities aimed at the innovative activity providing (research centres, design and construction bureaux, technological departments, experimental manufacturing units).

The innovations hindering factors as a whole can be identified as the production-related, economical ones and others. When speaking about the economical obstacles, the key ones, having essential effects onto the industrial enterprises are:

- lack of own finances;
- innovations' high cost;
- lack of financing from the governmental sources.

The most constraining effect onto the industrial enterprises' innovative activity is found from the side of production-related factors like:

- the enterprise's low innovative potential;
- lack of qualified personnel.

Other negative factors of high importance:

— lack of law, regulative and normative documents, controlling and stipulating the innovative activity;

- innovative structure immaturity or imperfection;
- low consumer demand for the innovative product;
- immature technological market;
- absence of clear definitions in innovative process' terminology.

Conclusions and prospects of further researches in the field. At present stage the industrial enterprise's I&I activity organisation process represents a prerequisite for that enterprise existence and progressive development. One of principal problems in innovative activity implementation by the industrial enterprises consists in the absence of such entity's own financial assets available for I&I project investing. To resolve the situation the enterprises do search the interested foreign investors but this way also has some essential difficulties. The innovations-related informational maintenance question is expected to be defined and closely considered. The process of I&I project creation and implementation at an industrial enterprise requires further detailed consideration with respect to the need in resolving both the external and internal problems of projects' organisation and management.

Literature

1. Голубовська, О.А. Дослідження інноваційної активності промислових підприємств України / О.А. Голубовська // Економіка розвитку. — 2012. — № 1. — С. 94 — 98.

2. Орлюк, О.П. Законодавче забезпечення інноваційної діяльності в Україні / О.П. Орлюк // Наука та інновації. — 2008 — Т. 4. — № 1 — С. 68 — 73.
3. Іляшенко, А.Х. Інноваційна діяльність промислових підприємств / А.Х. Іляшенко // Держава та регіони. Сер. Економіка та підприємництво. — 2012. — № 1. — С. 188 — 192.
4. Барановська, С.П. Планування розвитку інноваційних структур у машинобудівній промисловості / С.П. Барановська // Менеджмент та підприємництво в Україні: етапи становлення і проблеми розвитку. — Львів: Нац. ун-т “Львів. політехніка”. — 2008. — № 624. — С. 160 — 168.
5. Про інвестиційну діяльність: Закон України від 18.09.91 № 47 // Відом. Верхов. Ради України (ВВР). — 1991. — № 47. — Ст. 646.
6. Балан, О.С. Життєвий цикл інвестиційного проекту та інвестиційні рішення / О.С. Балан // Економіка харчової промисловості. — Одеса, 2012. — № 1(13) — С. 43 — 47.

References

1. Holubovska, O.A. Doslidzhennia innovatsiinoi aktyvnosti promyslovykh pidpriemstv Ukrainy [Research of innovative activity of industrial enterprises in Ukraine] / O.A. Holubovska // Ekonomika rozvytku [Economics of development]. — 2012. — # 1. — pp. 94 — 98.
2. Orliuk, O.P. Zakonodavche zabezpechennia innovatsiinoi diialnosti v Ukraini [Legislative support of innovation activity in Ukraine] // O.P. Orliuk // Nauka ta innovatsii [Science and Innovations]. — 2008 — Vol. 4. — # 1 — pp. 68 — 73.
3. Iliashenko, A.Kh. Innovatsiina diialnist promyslovykh pidpriemstv [Innovation activity of industrial enterprises] // A.Kh. Iliashenko // Derzhava ta rehiony. Ser. Ekonomika ta pidpriemnytstvo [State and Regions. Series: Economy and Entrepreneurship]. — 2012. — # 1. — pp. 188 — 192.
4. Baranovska, S.P. Planuvannia rozvytku innovatsiinykh struktur u mashynobudivnii promyslovosti [Planning the development of innovative structures in the machine building industry] / S.P. Baranovska // Menedzhment ta pidpriemnytstvo v Ukraini: etapy stanovlennia i problemy rozvytku [Management and Entrepreneurship in Ukraine: formation stages and development problems]. — Lviv: Nats. un-t “Lviv. politekhnika”. — 2008. — # 624. — pp. 160 — 168.
5. Pro investytsiinu diialnist: Zakon Ukrainy vid 18.09.91 # 47 [On investment activity: the Law of Ukraine of 18.09.91 # 47] // Vidom. Verkhov. Rady Ukrainy (VVR) [News of Supreme Council of Ukraine]. — 1991. — # 47. — p. 646.
6. Balan, O.S. Zhyttievyi tsykl investytsiinoho proektu ta investytsiini rishennia [The life cycle of investment project and investment decisions] / O.S. Balan // Ekonomika kharchovoi promyslovosti [Economy of Food Industry]. — Odesa, 2012. — # 1(13) — pp. 43 — 47.

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