

A HOLISTIC APPROACH TO REGIONAL BUSINESS DEVELOPMENT

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Abstract: The article is outlining the problems and the need for alternative (also called diagonal) approach in the development process of the regions and in particular on their business spheres. In this regard the first part clarifies the object of study - the region and its business sphere.

The next part is looking for an answer to the questions: how the regions can be transformed into business networks and how to become pillars of their overall (holistic) development; how in the process of their modernization to be used the achievements of megatechnologic revolution of the XXI century?

Afterwards certain models for organizing initiatives for regional /local business changes are presented.

Key words: business networks in regions/settlements; vision; ViStratPlan; holistic approach; omni-technological revolution; national business sphere

JEL: R11.

Introduction

The thesis proposed in this paper is that the implementation of the promoted up-to-date concept of 'regions in growth' would be impossible without applying a holistic vision and approach.

One of the most urgent priorities of regions¹ is developing their business by creating their own business networks. Thus, it would be

¹ The concept is used in this paper to refer to both macro (planning) regions and administrative regions (districts), groups of settlements, neighbouring settlements, etc.

possible to deal with the problem of having over-development in some regions and ignoring the development of other regions for prolonged periods of time. Regional development imbalances have already resulted in migration, shrinking towns and villages, etc.

In recent years, regional business has been largely neglected, its development largely depending on local business initiatives, some of them inadequately designed or targeted, without employing any scientific approach or a large-scale, strategic, long-term vision. In result, some regions have not been able to benefit from available resources and technological achievements; local structures and infrastructure; environmental capacity or human potential.

One of the reasons for not having an adequate regional business network developed is the lack of a critical mass of nationally responsible institutions, local authorities, committed scientists, policymakers, and civil society organisations (CSOs) with modern and visionary thinking. In many cases, all their actions have been divergent and based on the trial and error method.

Supporting European programmes and funds focus on the development of particular settlements². Despite being promoted as an integrated programme with a focus on regional development, Operational Programme 'Regions in Growth' is targeted mainly on particular settlements and not on regional business in general.

The lack of a paradigm for establishing a rational and sustainable business structure thus leads to the formulation of tactical objectives and goals designed to accomplish immediate results. State authorities and regional/municipality governments are primarily interested in short-term effects. They adhere to their marketing and populist policies without accounting for the long-term effects of certain action or inaction. The development of regional business spheres is left to the random actions of political parties which are in pursuit of their narrow political interests.

² This is a reference to Operational Programme 'Regions in Growth' which covers the period from 2014 to 2020. The programme focuses on energy efficiency and supporting centres in peripheral areas. Other documents employed as points of reference include the National model of polycentric development formulated in the National spatial development concept 2013 – 2015, etc.

1. The Concept of a Regional Business Sphere/Network

From a terminological perspective, regional business sphere is part of the National business sphere/network. A general conceptual model of the National business sphere/network is presented in Chart 1.

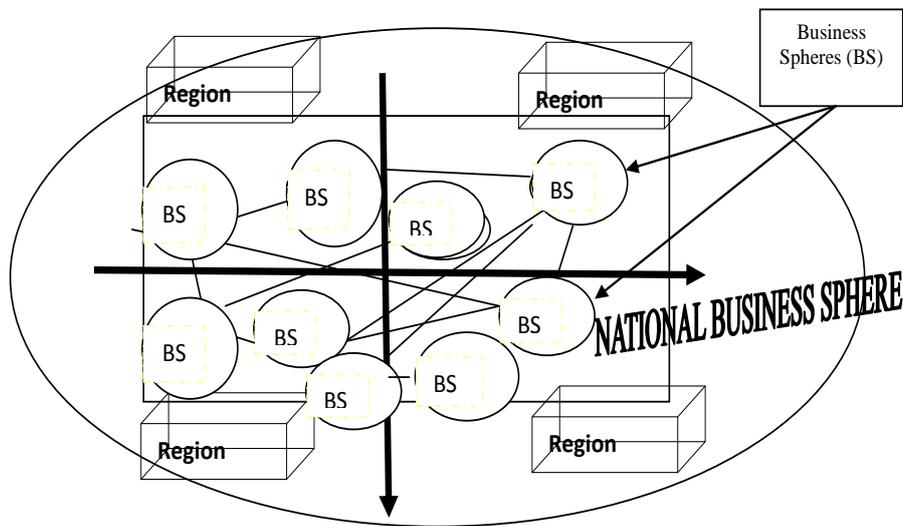


Chart 1. Concept of the National Business Network within a Regional Context

The employment of the holistic approach to the development of an individual region is presented in Chart 2.

The centre of the region is its business sphere (BS) which is both a distinct component and the backbone of that region. A regional business network consists of certain nodes and links which determine and maintain its structure. The strategic nodes of the region are regional business complexes, clusters, organisations, etc. Within this framework, their major nodes are individual business organisations (with or without established business units) and various business establishments, all of them with a common or separate infrastructure, superstructure and info structure.

Vertical structure of the established territorial unit (region)	Established spheres within the region	Major components of each sphere
Superstructure	BUSINESS SPHERE	Various business-oriented establishments and modes of organizing the business
Basic structures	SOCIAL SPHERE	Institutions/organisations
Infrastructure	ENVIRONMENTAL SPHERE	Institutions/organisations; components – water, soil, air, natural and man-made green systems, etc.
Info structure	MENTAL/POLITICAL SPHERE	Institutions/organisations; professional associations; action groups

Chart 2. A holistic approach to the scope of regions / settlements

The visual model of a regional business network is presented below (Chart 3).

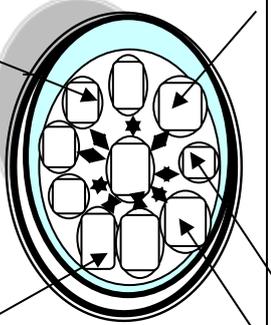
National and regional business network nodes		
Aspect – major components of the business systems	Configuration of the national business network and its components	Aspect – territorial business units
Separate business activities; Established business organisations; Business units – industrial parks; business parks; business zones; industrial business zones; Business clusters sharing common infrastructure in different combinations; Network of business organisations; Innovative business zones; etc. Common and separate business complexes of multiple and individual territorial units		Strategic national business complexes Regional and trans-regional business complexes Business/industrial complexes in the settlements Local business hubs

Chart 3. Structure of the national business network

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The issue on which holistic thinking should focus is that strategic bodies should follow the trajectory **FROM** an established regional business sphere (an existing set of various business activities and organisations) **TOWARDS** establishing a regional business network (consisting of business entities, i.e. nodes, which will act as a single whole led by the idea to benefit from the natural resources and human potential which are locally available and to ensure the reasonable welfare of local population. Being the backbone of regions, the business sphere will ensure their sustainable performance and further development. The convergent uniform development of the National business sphere will depend on identifying the best combination of factors and ratios. Some of them are illustrated in Chart 4.

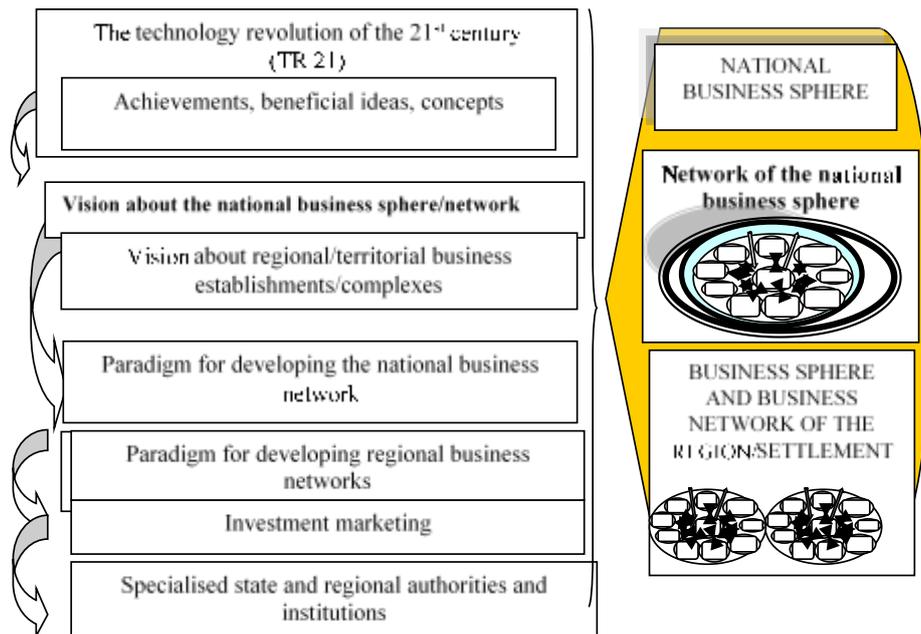


Chart 4. The system of prerequisites for developing the national business sphere

2. The Concept of the Diagonal Business Development of Regions

Major guidelines and indicators currently applied to regional development, i.e. concepts and operational programmes³, are not balanced. The documents prepared in compliance with them focus on describing the present condition of their objects (sites on the territory of the country), as well as on various findings and collected and systematized data and facts. They lack any serious insight into future and do not employ a future-based approach or a comprehensive vision which are most valuable for identifying appropriate projections and projects. Even though the integral approach is mentioned, no explanation is provided as to how it should be applied. No working model is proposed, either. The focus of attention is thus on the development of regions and settlements, yet not on their foundations, that is, on their business sphere. The aim then is to strike the balance between available regional resources/potential and the utilization of these resources so as to improve local people's standard of living and welfare. The regional development paradigm entails the management of several interrelated and interdependent processes:

- Regionalisation (the focus being on the balanced and sustainable development of regions, but not only of underdeveloped ones);
- + Diagonalisation (the focus being on the establishment of regional business networks and on the integration of business activities to benefit from the synergetic effect of utilizing the potential of certain territories simultaneously. The process of diagonalisation is a new type of strategic thinking and strategic action.

- + Neotechnologicalisation – this process relates to the prospective achievements of the **megatechnological revolution of the 21st century (TR 21)** based on digital and energy efficient technologies, new principles and approaches governing business and production, and renewable energy resources.

The diagonal approach implies applying non-conventional solutions and taking positive systematic U-turns. It brings under review the development of the system (i.e. regional development) by approaching it

³ This is a reference to the National Spatial Development Concept and Operational Programme 'Regions in Growth'.

from a different perspective. The concept of diagonal regional development relates to designing and taking turns and even U-turns (Yankov, 2015). It is based on **the paradigm of a rational and sustainable economy** (Yankov, N., 2009, 2011) which is in compliance with the statement 'back to the foundations of economy'. This statement proposes going back to nature and common sense, yet, by applying future-based thinking patterns and modern technology, principles, and instruments. Developing a rational and sustainable economy must entail the *Future-oriented paradigm of rational and sustainable regional and trans-regional development* (FOPRSRTD). We believe that such a paradigm is based on the following principle:

'Behind any conventional business project which is crucial to the development of a society (region/settlement) there might be an alternative project which would result in better environmental protection, more rational solutions, and higher real benefits.' (Yankov, N., 2011).

In our opinion, this principle applies to both the national business sphere and to the business networks of individual regions and establishment. To act in compliance with that principle, each region and the business establishments on its territory should actively engage in identifying opportunities to make their efforts and costs more rational, change existing structures, and even plan and take U turns if necessary.

The future-oriented paradigm of rational and sustainable regional and trans-regional development is a guideline for restructuring and for designing a more rational investment policy. In terms of this, some of the parameters of a regional business strategy are:

- Stakeholders should actively try to attract foreign investments while considering the nature of these investments, rather than seeking to ensure business development at any cost.
- Each regional business network offers a number of opportunities for reducing the damage on the environment and the public. Hence, an effort should be made to reconcile the demand for investments to the objective of preserving the environment, ensuring jobs for local residents, and preventing the depopulation of regions, which will result in increased internal and external regional security and sustainability.
- The governing idea should be that the ultimate beneficiary should be the public instead of the economic and political elite.

The diagonal approach is an alternative view and idea for regional development, for attracting and supporting smart investors, for producing various strategic ideas and models. In addition, it relates to and results in producing a number of synergetic effects.

One of the benefits of applying the diagonal approach to the thinking pattern and actions on a regional level might be the establishment of modern business entities with higher production and market potential; the formation of integrated teams of specialists, strategic managers, internal and external entrepreneurs, etc.

The prerequisites and the platform on which diagonal development is based are the sustainable economy paradigm, TR 21, and joint government and local initiatives.

The major aspects (axes) in the development of regional systems are vertical, horizontal, and diagonal. Each option has numerous branches or sub-axes. The visual idea of the major axes of development is illustrated in Chart 5.

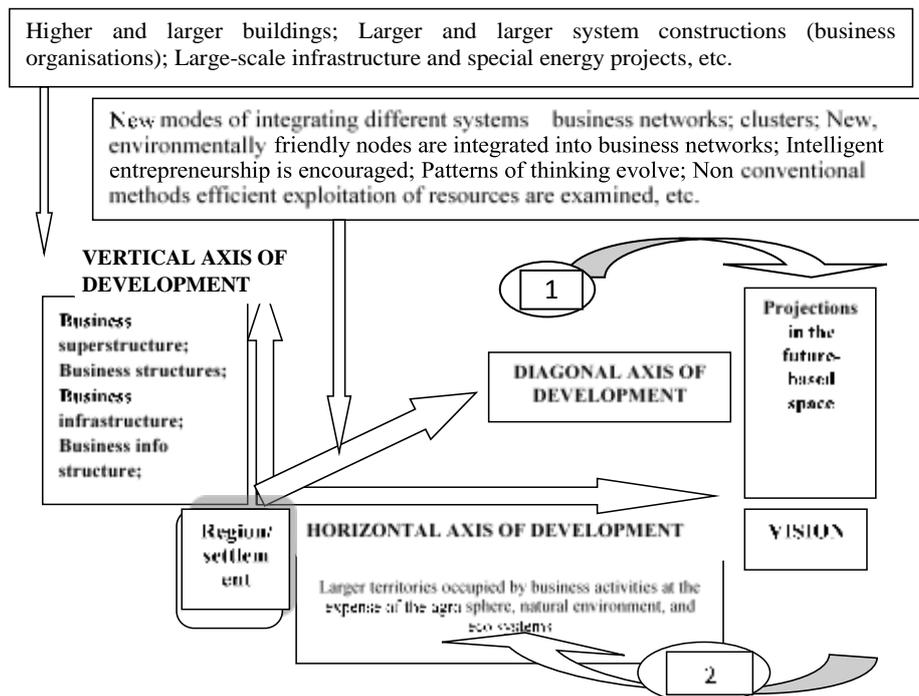


Chart 5. Axes of regional business development

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We believe that a comprehensive (holistic) approach must be applied to these axes, whereas in periods of transition or some major difficulty (like the one we are currently in) the focus must be on diagonal development. We therefore propose that changes in regional business networks may be implemented along a non-conventional (diagonal) axis in addition to the conventional vertical and horizontal development. (Yankov, N., 2015).

In the current period, the diagonal axis, considered to be the foundations on which the Future-oriented paradigm of rational and sustainable regional and trans-regional development is based, becomes a strategic priority.

At a national level, i.e. the business sphere of the country, diagonal development requires that vertical development (of priority sectors) must be combined with horizontal development (of planning regions, regions, municipalities, sensitive territories, etc.)

Within a regional context, diagonal development is a prerequisite for establishing favourable conditions for regular business development and for creating innovative complexes. These will, in turn, become the business drivers generating new investments, business systems, and production hubs in line with TR 21.

The objects of diagonal regional development are:

- Positive changes in existing business entities (either single enterprises or hubs comprising several enterprises);
- Developing links between the enterprises within a region, i.e. connecting them for the joint and complex deployment of local resources and potential;
- Creating business hubs on the same geographical location. Those business hubs require common infrastructure, info structure and super structure.

In our opinion, the model for business development in the 21st century should be based on the paradigm for development along the diagonal axis. The diagonal approach provides opportunities which would facilitate the work of economists, scientists, managers, etc. Hence, the main idea is to start from a diagonal (lateral) pattern of thinking and projecting and then identify the actions which should be implemented horizontally and vertically.

3. A Holistic Approach to the Development of Regional Business Networks

The holistic concept about the regions is the starting point for projecting their development as a whole and by individual components. The holistic (super) approach, which is comprehensive, relates to:

- Systematic, diagonal, prospective (future-based) thinking;
- Other approaches, such as the system or networks approach (Yankov, N., 2002), the visionary-project approach, the futurological approach, the cluster approach (Yankov, N., 2007), etc.;
- The conceptual design of large trajectories and the movement along them.

The following trajectories may be defined in terms of diagonal regional development issues (see Table 1).

*Table 1.
Trajectories of the development of business networks in regions*

FROM (a current condition)	TOWARDS (the next, intermediate, condition)	TO (a final condition)
Divergent actions (achieving some regional development along conventional axes)	Vision about diagonal-vertical- horizontal development	Compliance with the designed future-based model of the region/settlement;
Individual projections of regional structures in the future-based space; Accidental, unpredicted development along conventional axes; A 'termite' approach	Visionary-project approach at a national level and the level of individual regions	Creating non-conventional visions which will be actively employed to identify opportunities and initiate actions for developing the business network of the region; Establishing the business networks of regions; Processes are under control; events are predicted and seeking balance.

The objective of the visionary-project approach is to provide a vision about the development of a region/settlement, and above all, to lead

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to the formation of a business network. This approach is useful for designing prospective documents which refer to various levels of territories. Such documents include:

- * A macro-vision about the development of a National business network;

- * A vision about the development of individual regions – planning and administrative (and their business spheres/business networks, respectively);

- * A vision about the development of municipalities/territorial units and their business spheres/business networks, respectively;

- * A vision about the development of each individual settlement (for example, turning a settlement into a meta-town (Yankov, N., 2013);

- * A vision about the development of business establishments/entities – clusters, technological zones, industrial sites, industrial parks (and their business spheres/business networks, respectively);

The macro-vision proposed for economic development by the Bulgarian Investments Agency is to turn the economy into a high-technology hub connecting the East to the West (Radev, S., 2016). The idea, thus formulated, sounds declarative and is imprecise as it fails to provide a clear answer as to how or when this should be implemented.

Rather than identifying problems post factum and directing investments to problematic regions, the focus of efforts should be on designing a macro-vision about the development of regions and their business spheres.

Changes in regional business networks require the application of both the ‘top-down’ and the ‘bottom-up’ approach. The ‘top-down’ approach is helpful in designing visions, strategies, and projects (Yankov, N., 2009). The ‘bottom-down’ approach entails various initiatives and entrepreneurial thinking on behalf of stakeholders to promote the more balanced development of the country’s regional structure. The design of a vision should answer the question what the future may and must be when the achievements of the Technology Revolution of the 21st century (TR 21) are deployed to develop sustainable regions. From a practical perspective, the variety of options for developing the business network of a region may be presented as illustrated in Chart 6.

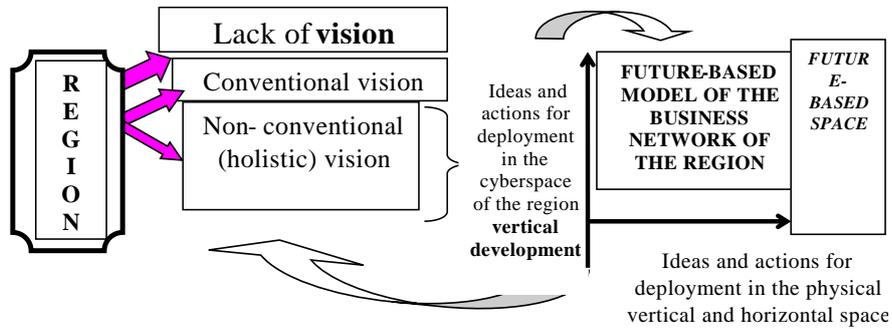


Chart 6. Alternative visions for regional business spheres

A general ‘map’ of the options for regional development and for assessing regional development visions is presented in Chart 7:

Options for developing the business network of a region	Accents in regional business development visions	
		Development based on conventional approaches and technology
<i>From a regional perspective</i>	Internal, external, and inter-regional development	Lack of major or strategic ideas about the development
<i>From a spatial perspective</i>	Better image as a business destination	Linear business development – improving the business structures which already exist

Chart 7. Focus of the documents related to regional business development

Such a ‘map’ may be used to determine the type of development, the initiatives and the activity of the parties involved in the process and the results to be accomplished.

The employment of the *future-based approach* relates to future-based thinking (Siegel, 1999) and the *visionary-project approach* and entails a balance between two related components – the exo-systemic and the endo-systemic approach. Under **the endo-systemic approach**,

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researchers and managers focus on the region which is the object of impact (development), yet without going beyond the circle (boundaries) they have identified in advance. The ultimate result thus accomplished is an aspect-based ('sector') perspective. The *exo-systemic approach*, goes beyond the boundaries of the region which is subject to research and development (or, to use the modern metaphor, thinking and action 'get out of the box'). Thus, in addition to forming a comprehensive vision of the object of impact, agents get awareness about its complex environment.

Applying diagonal thinking to the process of regional development instead of the termite approach means to employ a targeted visionary-project approach (Yankov, N., 2011). Hence, the trajectory to be followed should be **FROM** forming an initiative target group **TOWARDS** a jointly designed common vision (a future-based model or concept) **TO** the co-involvement of multiple parties for accomplishing set goals. This proactive approach is based on the **ViStraPlan** method. The visual presentation of its conceptual network is given in Chart 8. The length of the chain **Region – Vision – Plan** depends on the structure of the vision, its scope, its insight into future, and the ability to smartly identify the needs of the region/settlement. Chart 9 illustrates the basic elements which a summarised model of a regional vision should consist of.

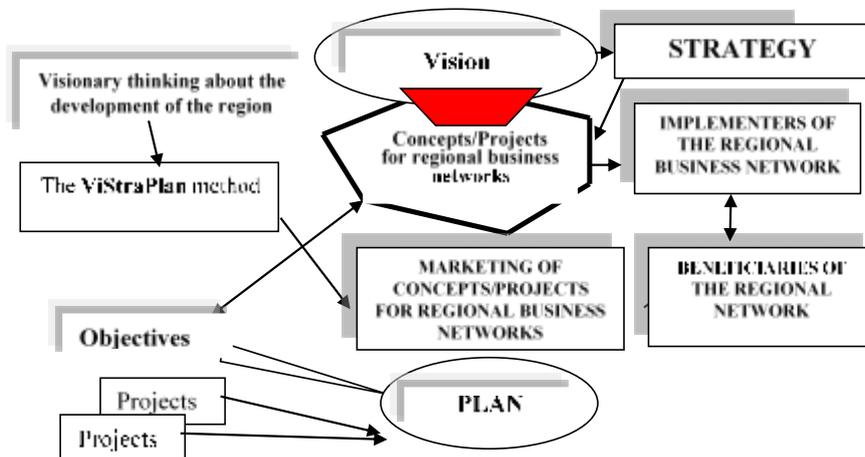


Chart 8. Visualisation of the ViStraPlan Strategy

 V E R T I C A L A S P E C T	Model of the vision about the region		
	VISION ABOUT THE REGION AS A WHOLE <u>Comprehensive future-based image</u> – prospective profile which is attractive, innovative, green and related to high technology Transforming settlement into meta settlements	Components of the vision about the development of regions	
		<u>Spheres:</u> Business, Social, Environmental, Political, Technical, etc.	<u>Functional regional macro-components:</u> Super structure; basic structures; infrastructure; techno-structure; info structure
	STRATEGIES – objectives and strategic actions	PLANS – how, by what means, when, etc.	
	HORIZONTAL ASPECT – THE TERRITORY OF THE REGION 		

Chart 9. Structure of the vision about the region

The cluster approach (Yankov, N., 2005) and the aerodynamics method (Yankov, N., 1990) may also be employed in the establishment of regional business networks in addition to the conceptual means deployed.

4. Integrating the Technology Revolution of the 21st Century (TR 21) into the Business Development of Regions

Diagonal regional development should be related, open and subjected to the ongoing revolution in technology (also referred to as the **mega-technology** revolution). To gain awareness about the bidirectional link which exists we need to point out several facts:

For half a century, we have been witnesses to a phenomenon defined as the third industrial revolution (IR3 – Rifkin, J. 2012, Rak 2013)⁴ or the fourth industrial revolution (IR4)⁵, (Hermann, Pentek, Otto, 2016;

⁴ Major accents: electronic and information technologies

⁵ Major accents: merging of technologies which go beyond the boundaries between physical, digital and biological; cyber-physical complexes; millions of people producing their own green energy in their homes, offices, and business systems;

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Industrie 4.0 2016). This dynamic phenomenon consists of waves of a varying nature and scale which affect economies and businesses, and hence, countries, regions, and settlements either positively, or negatively. TR 21 poses an extremely wide variety of opportunities and challenges. A specific feature of TR 21 is its development in three aspects:

- **Horizontally** (over time and space);
- **Vertically** (aggressive, step-by-step, exponential movement forward and upward through an increasing number of innovations (achievements);
- **Diagonally** – creating non-conventional technologies, based on digitalisation; provoking the diagonalisation of regional business establishments (diagonal thinking in the process of establishing and developing networks). TR 21 is expanding over time as well as over physical and cyber space. What is more, all these processes are taking place in a period labelled as the '**Conceptual Age**' of human civilization.

The development of TR 21 over time and space is illustrated in Chart 10.

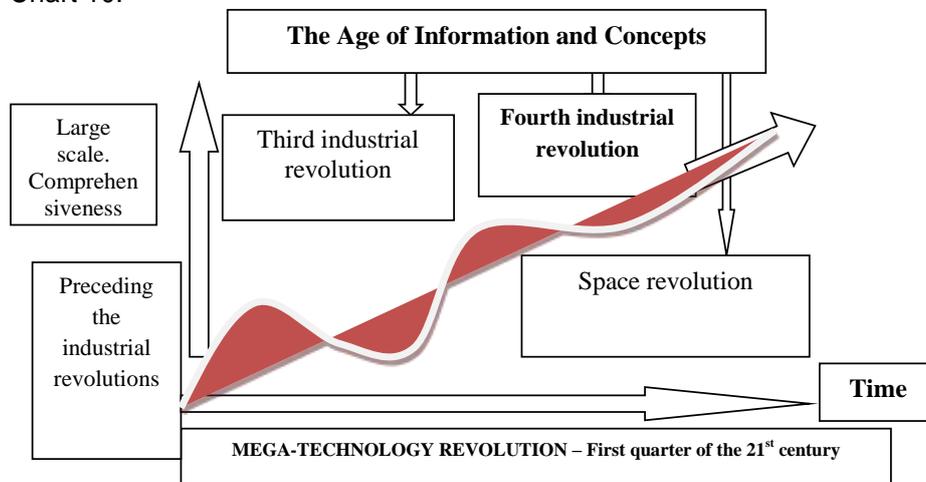


Chart 10. Development of the mega-technology revolution

sharing energy through the so-called 'energy internet' (Rifkin 2012); decentralised energy production, etc.

Within this context, we believe that in terms of TR 21 it is **one thing** to only engage in watching and spotting trends, and it is **a totally different thing** to have a modern national horizontal and vertical strategy available to respond to the challenges of the revolution (with no significant lag in time). In the **third** place, it is necessary to design a concept about the accents of regional development. **Fourthly**, decision-making and actions should focus on deploying the achievements of TR 21 in innovative territorial business complexes. In the **fifth** place, national and local authorities should take a joint effort to integrate TR 21 to the process of modernizing business in regions and settlements.

The main issue of the diagonal aspect of regional development is span the achievements of TR 21 and the establishment of modern regional business networks and at the same time, to ensure the two-way interaction between them. The visual model of the concept is presented in Chart 11.

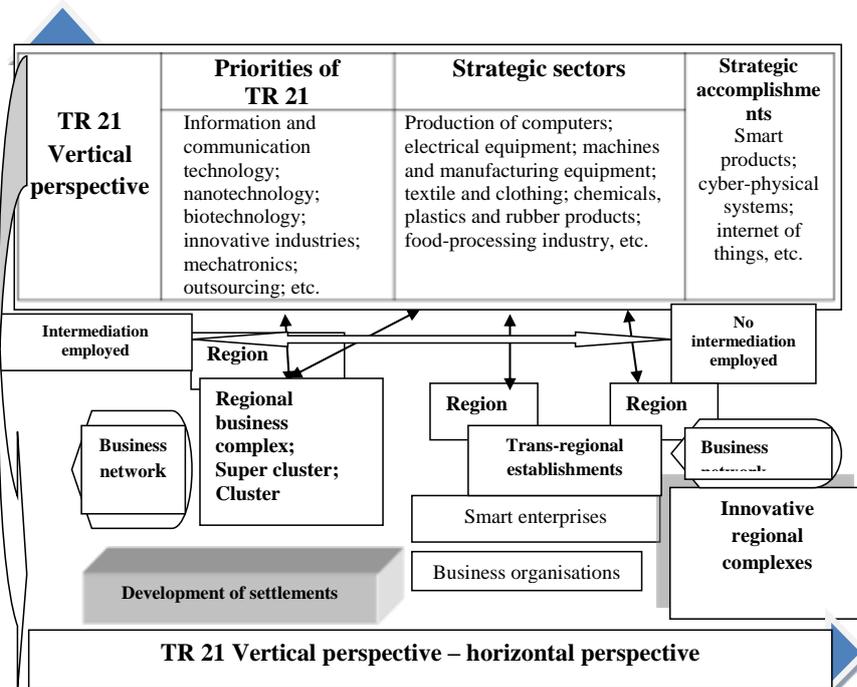


Chart 11. The relationship between TR 21 and regional business development

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The framework set by this scheme, raises several issues, such as:

1. Alignment of the achievements of TR21 to the physical and digital space of regions and their integration into business networks and nodes.

2. Synthesis of TR 21 accomplishments into an adequate regional vision and strategy.

3. Synchronisation between the visions, strategies, and actions and the national business sphere, as well as between regional and territorial business networks, and between different business establishments.

4. Reducing the gap in the dyad 'Growing achievements of TR 21' ↔ 'Degree of their deployment in individual regions and their business spheres'.

In conclusion, the deployment of TR 21 technology on a regional level requires modern visions to ensure modernization and growth.

5. Integrating the Initiatives for Diagonal Regional Development

A major issue confronting the future business development of regions is that of **combining and matching the initiatives** for technological changes. This should be accomplished vertically (top-down and bottom-up); vertically (between individual territorial systems) and diagonally (among different business initiative groups). A crucial moment is the availability and special preparation of regional entrepreneurs and urbanpreneurs (Yankov, N., 2010 and Yankov, N., 2007). They may initiate collective actions (co-entrepreneurship) and individual actions (entrepreneurship) in the design and implementation of large-scale projects. Those could be mini-clusters, clusters, industrial zones, innovative territories, etc. Another objective is to reach a moment at which action groups will organize themselves based on the vision they share about their

development to conduct active investment marketing and design smart development strategies by attracting foreign investments.

A major issue in the development of regional business networks is the existence of a distinct body, a group of physical and legal entities. In this context, all potential and real stakeholders should ensure the compatibility and synchronization of their initiatives, intentions, and projects through various combinations of undertakings. Chart 12 presents a model which includes all stakeholders of effective regional business development and assesses their efforts and achieved results.

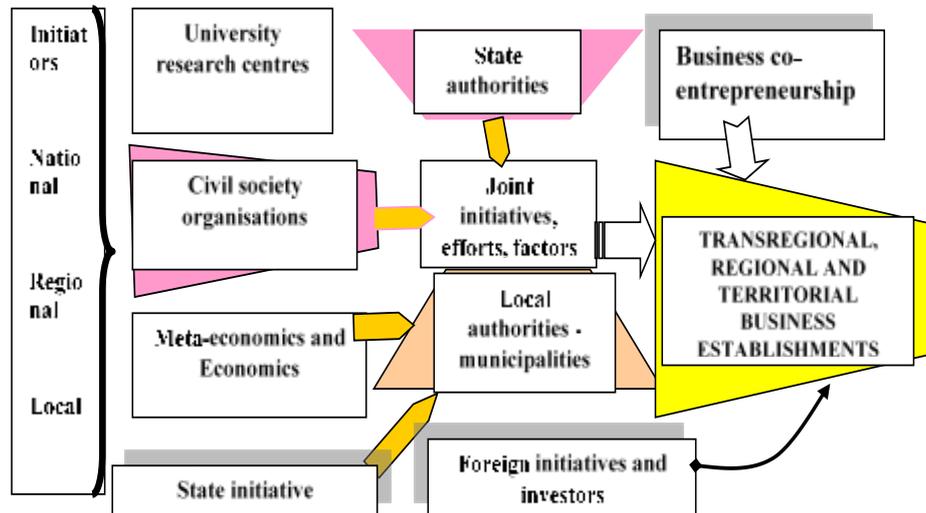


Chart 12. 'Map' of the joint effort for regional business development

Institutions, agents, and factors related to the processes of regionalization and diagonalisation may be classified in terms of their activity or their activity potential. The three major types are illustrated in Table 2.

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Table 2.

Types of initiators of regional business development and their features

Types of regional development initiators and their features	Characteristics of the actions of regional development initiators		
Proactive	Act positively, employing prospective and diagonal thinking	Conventional – state authorities, local authorities, civil society organisations	
Reactive	Act slowly, long after a problem has occurred, and in the wrong direction	Non-conventional – strategic initiative groups; local visionary societies which will benefit from the development of local business (manufacturing, services, tourism) and come up with alternative proposals	Lack of energy for alternative, diagonal development
Inactive	Take no action and merely observe	Respond to initiatives and entrepreneurial acts	

The dyad (Yankov, N, 2006) of regional development initiatives helps identify possible situations/scenarios in the process. Its configuration is illustrated in Chart 13.

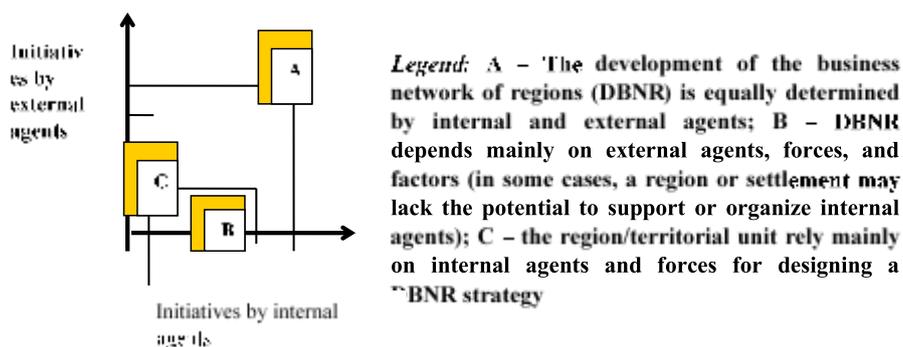


Chart 13. Intra-regional and extra-regional initiatives

The dyad above reveals the most appropriate scenarios for diagonal regional development. Regional business development initiatives must be consistent, compatible, and bi-directional, avoiding any megalomaniac projects or unrealizable ideas on different regional levels.

In terms of this, the objective is to ensure compatibility in situations in which specialised bodies take the initiative to design particular projects at a national level. According to the Bulgarian Investments Agency, 'investments are made in strategic sectors which individual regions and municipalities are planning to develop' (Yanev, S. 2016). The assumption is that potential investors will direct their investments to particular regions in the country *depending on the sectors which the municipalities are planning to develop*.

However, in many cases local authorities are not competent enough to determine on their own the sectors which their municipalities will specialize in or to conduct their own investment marketing. In other words, it is necessary to assess the capacity of local authorities to identify priority sectors based on their industrial resources, infrastructure, human potential, etc., as well as their ability to attract investors in developing high-technology industries to the benefit of regional development policies and visions. Hence, several options are available for establishing the business networks of regions/settlements:

1. Following the trajectory **FROM existing** (already established) units with a varying degree of infrastructure available **TOWARDS actively** seeking for the right investors and entrepreneurs.

2. Based on the vision designed about any particular region, to **create** the necessary conditions for business locations (physical sites, special areas, infrastructure, etc.).

3. Transformation (conversion, adaptation) of suitable sites to attract investors and benefit from the special funds for designing and implementing cluster projects.

4. Based on the first three options, the next step is to deploy active investment marketing to attract investors.

In the next place, within the regions, certain (large) business entities need to transform FROM Primary manufacturers and distributors INTO Aggregators, in other words, they should be engaged with the

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coordination and management of various businesses along the value chain (by organizing them into regional and trans-regional macro-clusters, clusters, and mini-clusters). Such business systems may function as business centres (hubs).

The smart exploitation of innovations will thus help achieve a balance in the triad **TR21** (utilization of its achievements) – **Regions** (modernized and developed) – **People** (improved quality of human life cycle and ensuring a balance among its major functions: **labour, living and recreation**).

Conclusion

Over the last years of the twentieth and at the beginning of the twenty-first century, the focus of attention was on the development of independent and small business entities, i.e. the *busdev* concept (Yankov, N., 2002). That was in compliance with the then modern principle '**small is beautiful**' (Shumacher, E., 1973). Applying the single-system approach to business entities, however, does not resolve the problems confronting the development of regional business networks which are the backbone of business. In the 21st century, we need to seek for opportunities and models for the multilateral integration of various establishments, such as clusters, urban business complexes, industrial zones, etc. A new principle which seems to be formulated nowadays is 'small in the big is beautiful'.

All these circumstances require thoroughly researching issues related to the business of regions/settlements, so that in addition to **reforms** and **restructuring, re-content** and above all, **re-invent** would be possible, too. An indispensable condition is to apply the creativity, skills and talents of the human factor, the focus being on the phenomenon known as talentism (Yankov, N., 2011).

References

1. Industrie 4.0 Hightech-Strategie der Bundesregierung Bibliographie, sitographie, 2016.
2. Hermann, M., Pentek, T., Otto, B. Design Principles for Industrie 4.0 Scenarios, 2016, last access: 4th May 2016.
3. Rak, K. I. La troisième révolution industrielle. Et dans l'éducation technologique demain ? Au-delà du clivage gauche/droite, 2013, Sur <http://pagesperso-orange.fr/techno-hadf/index.html>. (2013).
4. Rifkin, J. La troisième révolution industrielle. Comment le pouvoir latéral va transformer l'énergie, l'économie et le monde. Editions Les liens qui libèrent, 2012.
5. Schumacher, F. Small Is Beautiful: A Study of Economics As If People Mattered, 1973.
6. Siegel, D. Futurize your enterprise Business Strategy in the age of the E-customer. John Wiley & Sons, NY, 2016.
7. Yanev, S. Vazmozhnosti i perspektivi za investitsii i inovatsii. Prezentatiya na viziya na Balgarskata agentsiya za investitsii, 2016.
8. Yankov, N. Ochertavane ramki za biznespredpriemachestvo v transgranichni regioni. // *Biznesupravlenie*, Svishtov: AI Tsenov, 2007, 4, pp. 5-23.
9. Yankov, N. Edin model za planovoto razvitie na biznes-organizatsiite (Strategiya na aerodinamichnostta). // *Ikonomicheski zhivot*, 5, 1990.
10. Yankov, N. Kontseptsiyata za sazdavane i za upravlyavane razvitiето na biznesorganizatsionnata mrezhа (monograph). // *Yearbook of Tsenov Academy of Economics*, Svishtov: AI Tsenov, XCIX, 2002, pp. 123-217
11. Yankov, N. Formirane i marketing na klastari i biznesmrezhi - Biznesupravlenie. // *Business Management Journal*, Svishtov: AI Tsenov, 3, 2005, pp. 23-45.
12. Yankov, N. Diadite – sredstvo za opredelyane na ikonomicheski asimetrii. // *Ikonomicheski asimetrii v obedinena Evropa, Yubileyna mezhdunarodna konferentsiya*. Svishtov: AI Tsenov, 2006, p. 102-109

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13. Yankov, N. Marketing na paradigmatata 'Ratsionalna ikonomika – ratsionalna nauka'. // *Yubileen almanah 'Nauchni izsledvaniya'*. Svishtov: AI Tsenov, 6, 2006, pp. 173-206.

14. Yankov, N. The necessity for a different paradigm for economic development. // *Amfiteatru Economic*. Bucuresti: Academia de studii economice, 25, 2009.

15. Yankov, N. Education and training needs in the local development in the Lower Danube Region (Bulgarian situation). // *Amfiteatru Economic*. Bucuresti: Academia de studii economice, 12, 2010, pp. 800-814.

16. Yankov, N. Analiz na otnoshenieto talantizam – talant – strategiya. // *Dialogue*. Svishtov: e-journal of D. A. Tsenov Academy, 3, 2011.

17. Yankov, N. Holistichniyat marketing kato integrator na biznesmrezhi. // *'Economic World' Research Library*. Svishtov: AI Tsenov, 113, 2011.

18. Yankov, N. Tezisi po sazdavane na 'metaselishta' /'metagradove'. // *Standarti i predizvikatelstva pred publichnata administratsiya prez 21 vek – Yubileyna mezhdunarodna nauchna konferentsiya*. Svishtov: AI Tsenov, 2013.

19. Yankov, N. The system diagonal development concept. // *European practicess and and national reflections in the planning: International Scientific-practical conference*. Svishtov: AI Tsenov, 20015, pp. 91-97.

20. <http://www.sme.government.bg/?p=33687>

21.

http://www.sme.government.bg/uploads/2016/08/Obqvlennie_NIF_8- - final.pdf

22. <http://pagesperso-orange.fr/techno-hadf/index.html> Technologie futur: approche systémique; la 3^e révolution industrielle.

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