

Implementation of smart public sector governance systems in the large cities in the Southeastern planning region of Bulgaria

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INTRODUCTION

This exhibition focuses on the need to develop smart technologies in regional development. In practice, our time is emerging as the age of information technology. The focus of the development of information systems is on the implementation of smart technologies at the territorial level. An attempt is being made to market intelligent public sector management systems in large cities in the South-Eastern Planning Region of Bulgaria



METHODOLOGY AND THEORY FRAMEWORK

- Prioritization must take into account not only the potential impact of smart city decisions, but factors such as compliance with government policy and existing culture. If the implementation of smart solutions requires significant changes in behavior, one of the main goals of the city administration may be to stimulate new patterns of behavior.
- In practice, the main major cities in the Southeast Planning Region are Burgas (210,720), Yambol (68,074), Sliven (90,005) and Stara Zagora (136,475), with a total population of 505,274. In practice, however, these cities are municipal centers, which means that their gravitational potential is greater.

METHODOLOGY AND THEORY FRAMEWORK

- The concept of a smart city, formed in the early 2000s. It is focused mainly on the development of technology and infrastructure. From a methodological point of view, it is important to impose the model of quality implementation of new technologies, creation of large data centers, intelligent sensors and automated electrical networks to develop smart technologies in urban systems

Figure 1.

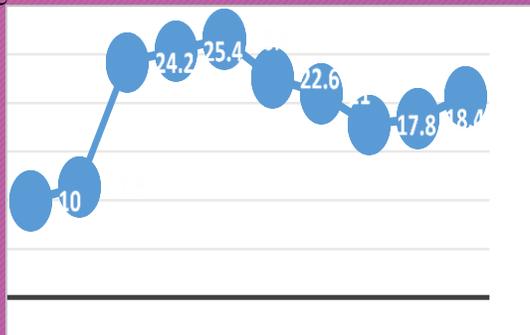


Fig. 1. Persons using the Internet to interact with public institutions in 2020 (12 months) Bulgaria Source: NSI

Household access to the internet	2016	2017	2018	2019	2020	2021
total for the country	63.5	67.3	72.1	75.1	78.9	83.5
By statistical regions						
Northeast	67.3	68.7	73.9	74.0	77.7	85.2
Southeast	60.9	62.1	70.0	74.7	77.2	81.7
By types of connections						
Narrowband connection	4.1	2.3	2.6	1.5	3.6	.
Dial-up connection via landline or ISDN	0.5	0.7	0.4	0.5	0.5	.
Broadband connection	62.8	66.9	71.5	74.9	78.6	83.5
Fixed broadband connection	56.7	58.7	57.9	57.8	59.4	62.7

Fig. 2. Access of the population (households) to the Internet in the South-East planning region. Source: NSI

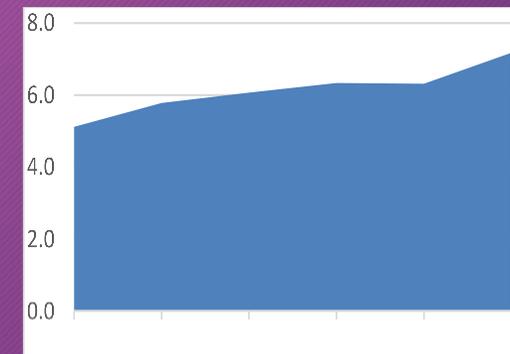
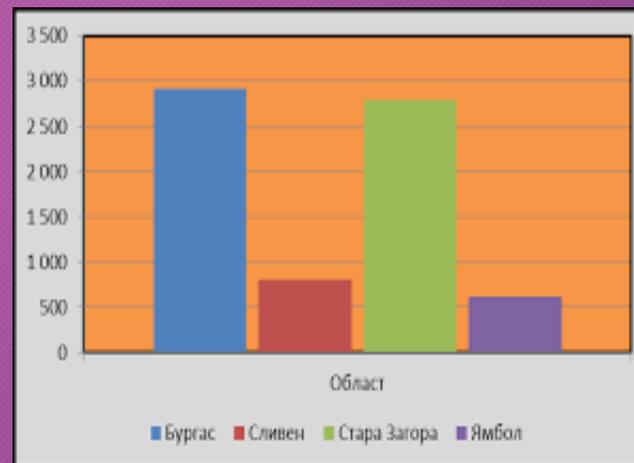


Fig. 3. People who use the Internet regularly (every day or at least once a week) in Southeastern region. Source: NSI

E-SERVICES' DEVELOPMENT OF THE MUNICIPALITIES IN SOUTHEAST PLANNING REGION

- In Bulgaria, a relatively slow development of electronic services at the level of planning districts is noticeable. In the South-East Planning Region, several registration procedures and licensing regimes, including electronic registration of road vehicles across the country, are implemented sequentially. In addition, the slow transition to information technology enforcement has a negative impact on the number of people who use the Internet to interact with public institutions



INTERNET PROVISION IN THE SOUTH-EAST PLANNING REGION

However, the state of internet provision in the South-East Planning Region has improved in recent years. E-commerce in the region has improved, as shown in Figure 4, which shows the growth of e-sales. We can summarize that in the last three years the annual growth of e-commerce in Bulgaria is between 21% and 35%. The estimates of the Bulgarian E-Commerce Association (BEA) are similar.

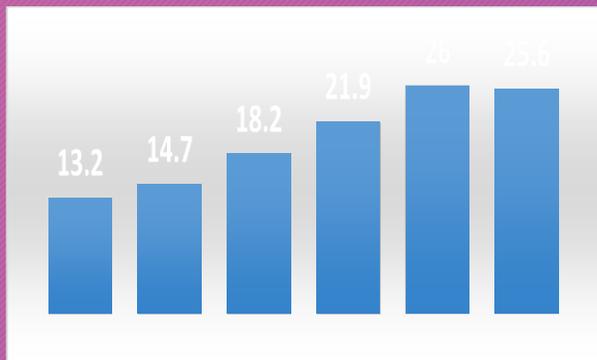


Fig. 4. Number of persons per 100 who purchased goods and services online for personal use during the last 12 months in the South-East region in the period 2019-2020. Source: NSI

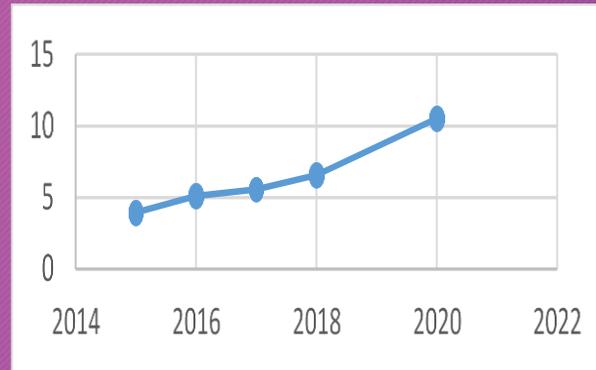


Fig. 5. Dynamics of electronic services in the municipality of Yambol in%. Source: NSI

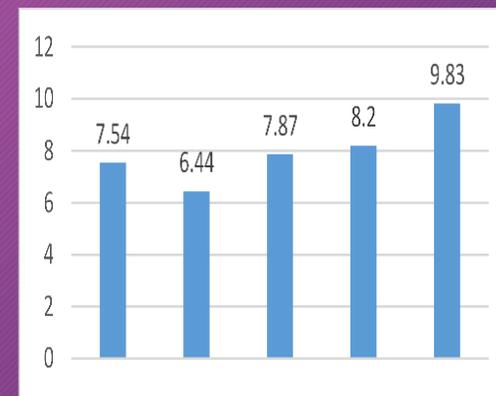


Fig. 6. Dynamics of e-services in Burgas municipality in %. Source: NSI (2016-2020)

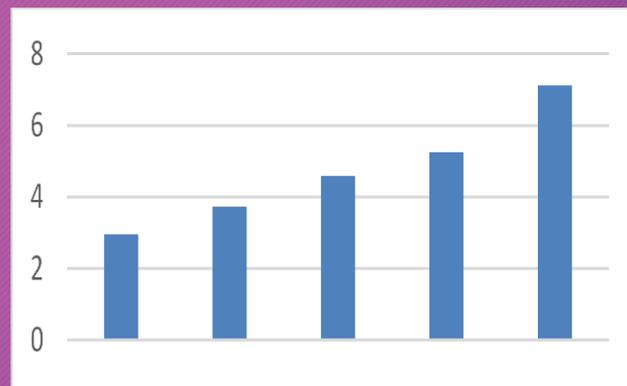
IMPACT OF ELECTRONIC TECHNOLOGY ON PLANNING AREAS

Despite the established use of the Internet, it is necessary to see how often and how often it is used by the population in the planning area. According to national statistics, the number of people who use the Internet regularly (every day or at least once a week) in the northeastern region is just over 70% in 2021. Stara Zagora district has a coefficient of demographic substitution (ratio of the number of people in the age group 15-19 years to those in the age group 60-64 years) of 63.1%, which is close to the national average. The Municipality of Sliven strives to use the principle of "thematic concentration". that is, focus on key thematic areas, thus aiming to maximize the impact on the effectiveness of funding and results orientation. Results have been achieved, but in the field of e-government there is some warming, which can be overcome with more activity on the part of the municipality.



Fig. 7. E-services in St, Zagora for the period 2014-20 in %.

Source: NSI



"smart city"

All settlements aim to stimulate growth in the direction of a "smart city" by implementing smart solutions and innovative technologies in the urban environment and in particular in the field of electric and shared mobility, the renovation of buildings and the introduction of renewable energy sources, as well as the inclusion of citizens in these processes. Within the planning area, work is being done to implement the "Sharing cities" platform, which aims to demonstrate the real potential of changing cities as a result of the implementation of smart solutions and the value that these solutions add to the economic, the social and ecological development of cities.



CONCLUSION

It is obvious that information technologies are widely used in all spheres of public life and with each passing moment they are becoming more and more important. They are an integral part of business communications and are actively involved in all levels of urban governance. After the pandemic, this process became especially relevant. The presentation of the leading cities in the South-Eastern planning region in Bulgaria shows that much more effort is needed for the development of smart technologies. In practice, by improving the level of use of information technologies, opportunities will be created for the application of successful models of smart practices in urban development.

THANK YOU FOR YOUR ATTENTION !!!

