

SMART SYSTEMS IN LITHUANIAN RE MARKET

RE MARKET TRENDS
June 2015



- RE developers' investments in smart homes are low.
- Smart systems offered by RE developers are focused on lower operating costs.
- Smart systems are becoming cheaper and affordable not only in the luxury class segment.
- More active application thereof in RE market is being impeded by four basic reasons: lack of economic benefit, low flexibility, underdeveloped service infrastructure, and incompletely solved security issues.
- It is likely that in the near future the expansion of smart systems in the Lithuanian RE market will occur through the incentive of individual RE purchasers.

SMART SYSTEMS IN LITHUANIAN RE MARKET

Smart technologies are rapidly penetrating into people's lives, so there is no surprise that they can be found in the real estate (hereinafter – RE) market. It is possible to state that housing is really smart if we find at least several of the following systems:

- Centralized control of multimedia devices, e.g. using a tablet PC or smart phone
- Voice controlled smart devices at home
- Auto-controlled curtains
- Water leakage detectors, remote control of water cut-off valves
- Smart sensors for air quality monitoring
- Instant data transmission from sensors to a smart phone or tablet PC
- Smart wall sockets, which can be programmed, activated/deactivated remotely, and can track energy consumption
- Smart door locks, which can be unlocked using not only a key but also a programmable code and allows to see whether the door is locked and monitor its locking/unlocking statistics
- Thermostats, self-adjusting to the living habits, smart conditioning system, which identifies a person by the GPS signal of a smart device and knows the temperature to be maintained in that room
- Smart lighting and smart carpets, which respond to movement and activates automatically, using various colours
- Automatic watering of plants and animal waste collection
- Smart refrigerator, which monitors food quality and can inform the owner
- Smart bed, which can constantly monitor the rhythm of person's heart, body temperature, and other important parameters, as well as send data to the ambulance or a smart phone, if needed
- Sleep cycle calculator, smart alarm clock, which self-adjusts to the sleep cycle of a sleeping person and wakes him/her up at the right time
- Smart robot vacuum cleaners
- Smart money box that can be programmed to remind a person if he/she forgets to put a coin into it
- Smart toothbrush, which analyses movements and warns if teeth are cleaned improperly

There are more various smart technologies; new systems are being developed constantly as well. By the present day their development in RE segment has been relatively slow due to several reasons:

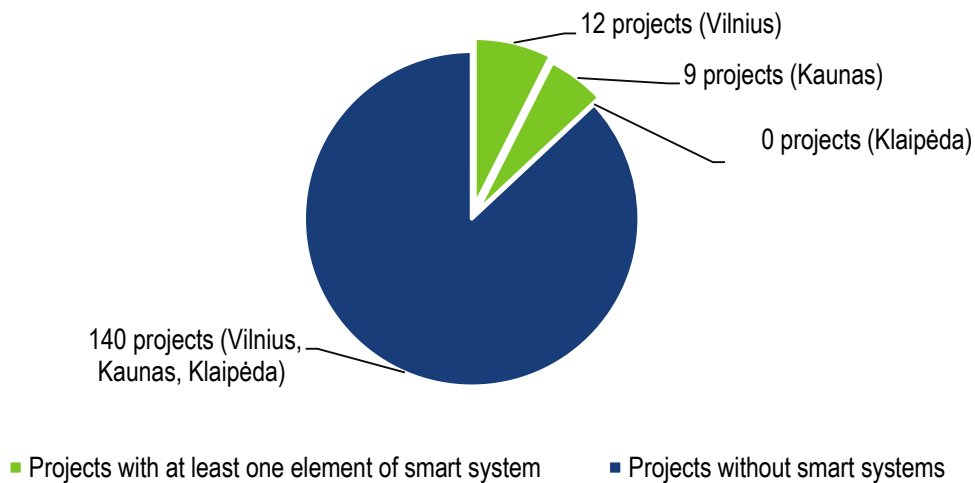
- Relatively expensive – system acquisition and installation, depending on the selected systems, often amounted to no less than 10 percent of the housing price
- Low flexibility – installation of smart systems has often been complicated and unappealing due to the need of new wiring, thus leading to both high repair costs as well as great inconvenience
- Underdeveloped service infrastructure – smart systems have often been developed by different manufacturers, which compete with each other, therefore different systems were not always compatible one with another, and not always could have operated reliably

Incompletely solved security issues – remote control and monitoring of home environment poses the risk of hackers' attacks. In 2014, the analysis conducted by Hewlett-Packard showed that, having analyzed 10 major smart home systems, there were about 250 possible security gaps identified.

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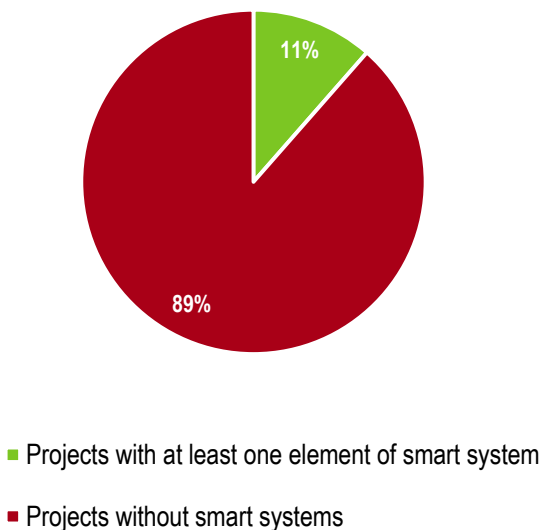
Regardless of the fact that smart systems give exclusivity in the market, the developers' investments in such technologies are minimal and the number of such projects is very low in the market. The solutions, which meet the conception of smart technologies, are available barely in 13 percent of real estate projects, currently under development in Vilnius, Kaunas, and Klaipėda. Thus purchasers, who wish to live in smart housings, need to invest in installation of smart systems additionally.

Project distribution by 'smartivity'



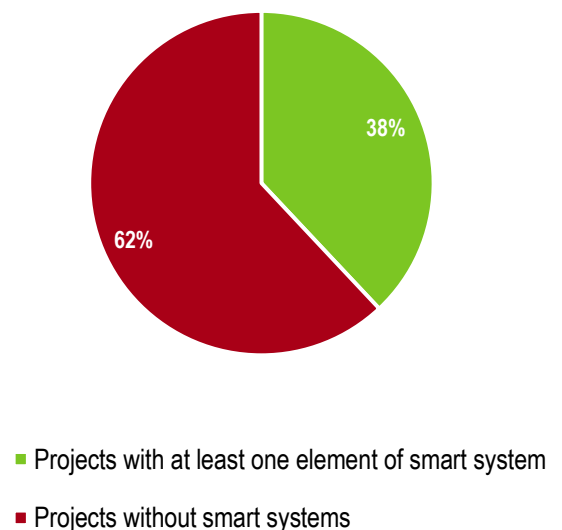
Source: Inreal

Project distribution by 'smartivity' in Vilnius



Source: Inreal

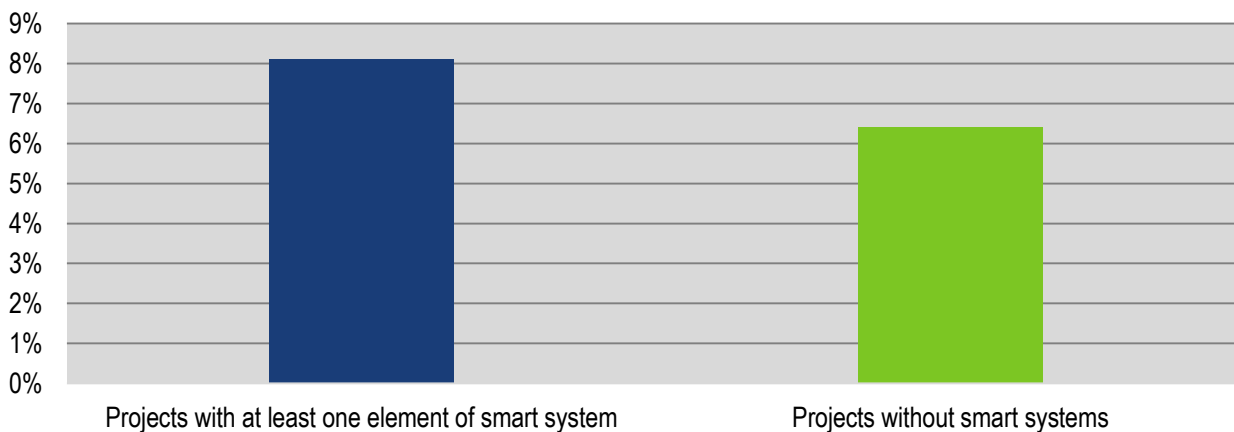
Project distribution by 'smartivity' in Kaunas



Source: Inreal

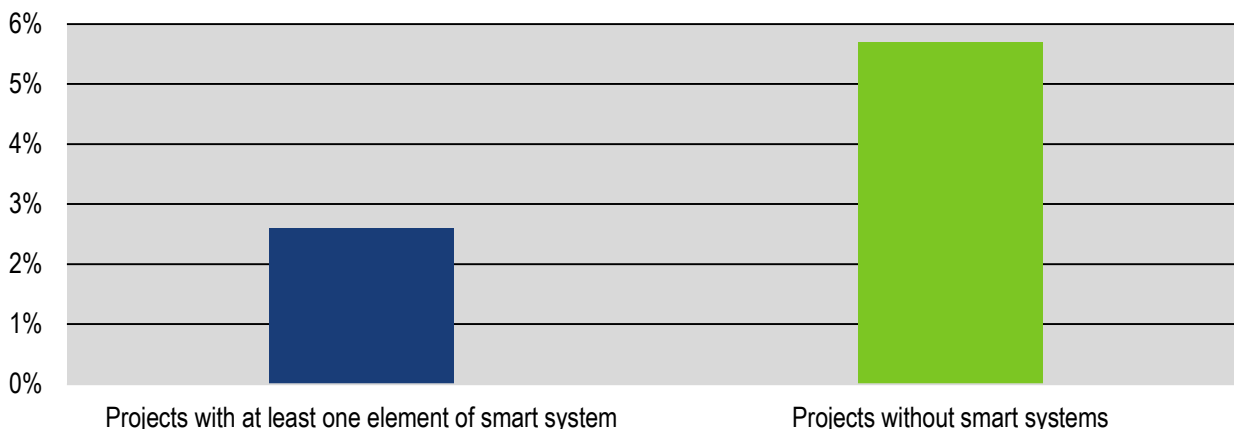
Since the 'smartivity' of housing projects being developed in Lithuania is minimal, therefore the prices vary insignificantly – the prices of projects with smart systems in Vilnius and Kaunas are higher by 2-3 percent, averagely, than similar projects without smart systems. The most popular smart projects in Vilnius are the ones, which cost 1,500-1,600 EUR/sq.m. in the middle class segment and 2,400-2,600 EUR/sq.m. in the luxury class segment. Meanwhile, the most popular smart apartments in Kaunas cost 1,000-1,200 EUR/sq.m., while the sales of more expensive projects are very poor.

Relative project realization from supply per month in 2015 Vilnius



Source: Inreal

Relative project realization from supply per month in 2015, Kaunas



Source: Inreal

Comparing the sales of smart projects with the sales of projects without smart systems, we can notice that trends in Vilnius and Kaunas are different – at an average, the projects with smart systems are sold more quickly in the capital city. Meanwhile, the rate of such project sales in Kaunas is lower. It is likely that such situation exists as a result of different purchasing power in the cities. Income of residents in the capital city is higher thus the demand of smart systems at home is also higher in Vilnius.

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The majority of newly constructed RE projects in Lithuania does not offer smart solutions; and, even if developers invest, they choose smart systems, which allow using and saving energy resources more efficiently. However, yet the payback of smart solutions is low and they are considered to be an element of attractiveness, convenience and exclusivity rather than an economic incentive. There are the following four main factors limiting the development of smart solutions in RE projects:

- Relatively expensive
- Low flexibility
- Underdeveloped service infrastructure
- Incompletely solved security issues

Current trends allow presuming that development of smart solutions in new RE projects should not be expected for the near future – there is a lack of demand, since the economic benefit is too low. More frequently, the RE purchasers acquire housing and install such smart solutions and to the extent they require.

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ABOUT COMPANY / CONTACTS

INREAL GROUP



JSC "Inreal GEO", JSC "Inreal valdymas" and JSC "Inreal", provides probably the widest spectrum of services in Lithuania, related to real estate. Inreal group companies belong to SC "Invalda privatus kapitalas". About 90 employees are currently working in Inreal group; mediations in lease or sale of more than 550 thousand sq. m. of commercial premises, over 1,000 residential housing objects, and over 200 land plots. The company mediates in 40 residential housing projects, 24 investment projects, or their portfolios. More than 4,900 valuation reports and about 80 consultations (feasibility studies, investment memorandums, and market research) are being drawn up annually. The value of asset of valuation is above 2.5 milliard Litas. Company offices or representations are operating in Vilnius, Kaunas, Klaipėda, Šiauliai, Panevėžys, Mažeikiai, Alytus, Plungė and Utena. Currently JSC "Inreal Valdymas" develops two real estate projects: houses in Nida "Kopų vetrunges" ("Dunes weathervanes"; „Kopų vētrungēs“) and apartments and comercial premises in Klaipeda oldtown "Danes uzutekis" ("Danes Bay"; „Danės užutēkis“).

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