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Although nowadays shadow education in many countries is a common phenomenon, its social functions on different spheres of life have not been widely reviewed. The purpose of the paper is to show that in Iran one of the private tutoring centers' functions is the adjustment of social institutions – especially the government - in relation to gender policies. In other words, private tutoring centers – as an informal institution – affect on girls/boys’ relationships. They may prepare a subterfuge way to reduce the pressure of “cultural conflict” and “ambivalent sexism” prevailing in the society. Based on this idea, the paper contains the following sections. First, the concepts of cultural conflict, ambivalent sexism and intermediate institutions, as a theoretical concept of the paper explained. Second, the conflict between the Iranian, Islamic and Western cultures on the challenging topic of "relationship between girls and boys" is noted. This section explains the gender policy of Iran's government, some evidences from school textbooks. The next section briefly refers to Iran's education system and its shadow, focusing on private tutoring centers - as an intermediary institution - which tries to adjust government gender policies. The paper ends with conclusion.

Keywords: Ambivalent Sexism, Cultural conflict, Private Tutoring, Social Function, Iran
2. Built environment and health promoting behavior: Meta-analysis in the broader sense

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This article explores the effect of built environment on health promoting behaviour. While most health-related research regarding the built environment has focused on physical health there is an emerging body of evidence linking the built environment and mental health. Within a last decade an interesting phenomena called health promoting behaviour became a significant agent in relationship with built environment. Through a meta-analysis in a broader sense, the current study reveals that health promoting behavior is not a single but rather a very complex psychological and community oriented agenda which combines variables from physical health promoting behavior, such as physical activity, nutrition-related behavior, substance disuse, psychological well-being, injury prevention and traffic safety. It discusses some important issues of these phenomena and finally it offers some built environment interventions that could be used to enhance health promoting behavior.

Keywords: Built environment, Health promoting behaviour, Physical health, Mental health, Meta-analysis in the broader sense
The following article is aiming to show that facility management (FM) is a very important aspect of the everyday business life of every big corporation. Having good management of office premises, office buildings, big industrial factories, small office places and workspace itself is crucial for running a successful business. According to the European Facility Management Association in their first European FM Market Data Report, the FM market in EU is approximately 5% of the GDP of the Union. Having this in mind, we can conclude that this market is very big and its potential, especially in Bulgaria is enormous. There are close to none researches in Bulgaria on the effect of facility management and corporate real estate management on companies. The aim of this research is to find out the current situation in Bulgaria and to extract the main factors, according to Bulgarian facility managers, which force them to use professional FM services. In the first part of the article, the author has made an overview of what facility management is, what are the different FM theories, how this relatively new business is shaping. The facility management theory and practices from best known FM professors and specialist from the world were summarized and mixed with different researches and surveys that were taken in recent years. The second part of the paper is dedicated to a survey the author has made, which aimed to show what are the main factors affecting the effectiveness of companies, using professional facility management services. The factors are: motives, organization, added value, infrastructure.

**Keywords:** Facility Management, Property Management, Efficiency, Bulgaria, Corporate Real Estate strategies
4. Sustainability principles in retrofitting and re-use of industrial heritage buildings

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Energy retrofitting of existing buildings and among them also retrofitting of historic and heritage buildings is becoming increasingly important and specifically in EU also supported by various funding schemes. Meanwhile the results in the residential and public sector are already noticeable, many historic buildings previously intended for production (industrial, agricultural buildings) have been facing functional redundancy. In most cases, the investments for the adaptive re-use and energy refurbishment of these buildings are not interesting for private sector and cannot be financed by the public sector. In practice this situation may result in further degradation or even collapse of these valuable public assets.

This paper is intended to define the specific obstacles and limitations in the field of energy retrofitting and adaptive re-use of industrial buildings. For this purpose a literature review of sustainability principles in the framework of reuse and retrofitting of industrial heritage buildings is presented. Literature review is based on the relevant literature search according to five specific fields: environment, economy, social-cultural aspects, technical questions and organisation. Many authors emphasise the need to find a suitable approach to preserve architectural heritage. They further suggest that introduction of new technologies is essential to improve energy efficiency and climate resilience. New financing schemes, including a wider variety of sources and actors have to be found with an aim to support the institutions and local or national policies that may obstruct or enhance implementation of new measures.

Keywords: Sustainability in Environment, Socio-Economic, Living environment, Demographic context
5. Assessment of emergency water wells in the Rzeszów city

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Supply with water of a good quality is essential to the proper development of cities. The reliability of water supply is influenced by many internal (quality and failure of its network) and external (climate change, terrorism) factors. City districts where access to emergency water is provided may be of value to customers in the real estate market provided they maintain good water quality in these sources. The paper presents water quality study in emergency water wells located in the Rzeszów city (SE Poland), which has about 200 thousand inhabitants and about 40 thousand students. Selected wells are widely available and used in the absence of water from the water supply network. Water sampling stations studied were located to characterize their representativeness from the point of view of emergency water supply to the city. A quantitative balance was also made. It was found that most of the wells meet the requirements for drinking water, so they can be an alternative source of emergency water supply. The presented quantity balance of water supply for inhabitants of Rzeszów city in a crisis situation showed that the emergency water wells are covered by all the unitary norms in force in area of water supply in case of crisis.

Keywords: water supply, external factors, water quality, Rzeszów city, Poland
6. Improving energy efficiency of existing buildings in Slovenia through regulatory incentives

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The concept of sustainable development implies limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities (Sustainable development commission, 2016). By improving the energy efficiency of existing buildings with renovation activities, total energy consumption in the European Union (EU) could be reduced up to 5-6% (European Commission, 2015). However, throughout Europe, renovations of existing buildings are performed only on approximately 1% of the building stock (GPBN, 2013, p. 3). EU and national EE regulatory provisions have a crucial role in encouraging more EE renovations of existing buildings. Specific regulatory instruments have been implemented at EU and national level with the aim of stimulating energy efficiency related measures in existing buildings. However, in Slovenia, improvements of regulatory incentives could be made, which should result in (more) stimulating policies for EE investments in existing buildings. This Article will be unique in providing an overview of Slovenian regulatory provisions, regarding energy efficiency in existing buildings. The comparative analysis will focus on regulatory provisions on EU and national level, which will form a conceptual base for the determination of possible regulatory barriers, that hinder the uptake of more EE renovation activities in existing buildings in Slovenia. The presented recommendations for improvement were substantiated on the basis of the research findings of the conducted analysis of national regulatory provisions and successful EE regulatory incentives, implemented in EU Member States.

Keywords: energy efficiency renovations, existing buildings, regulatory provisions
7. **Reshaping urban environment for development of future cities**

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This article focuses on the correlation between urban design, cities, social and cultural environment. The starting point for the research that was conducted in past few years was focused primarily on how to design a healthy living environment and how to develop a healthy urban environment for all the users of public spaces. This article is guided by the same thought but it is focused on planning and producing sustainable urban environment that will guide community into a better social and cultural development of the city. The development of the topics on how to design a building and environment design that can potentially change and shape our habits and health has led to attempts to design, plan and revitalize a place that, in the past, had low livability factor. This article is proposing that development and revitalisation of the cities with existing small amount of user friendly living spaces can, long term, not only bring benefits to a community and its social aspect, but can also have huge influence on the quality of users’ life and improve cultural and learning networks in the city. With good evaluation and implementation of all the aspects of livability into a new urban environment we can shape a better future for the community and change the way of how people use and perceive their city. The article will also explore the future of society, community engagement and publics’ role in how we shape public city spaces. In the research part of this article the case study is exploring livability aspect in the city of Rijeka, Croatia. The case study offers the data and the main analysis of urban city spaces. In the discussion part there will be proposed some guidelines and options of reshaping, modification and revitalization urban places that are now forming environment and are influencing social, cultural and health development of the city. The main aim is to propose a different approach to creating functional, sustainable and healthy public urban spaces to achieve growth of the city, better livability and implementation of different networks all the while keeping users’ and inhabitants’ needs in mind.

**Keywords:** Urban environment, Urban planning, Livability, Sustainability, Social and Cultural context, Sustainable communities
After the independence of Slovenia, the economic and political system in Slovenia has been more focused on the appropriation of the former socially-owned property as to development, cooperation and developing of collective entrepreneurship and industry. Slovenia's independence and the transition to a market economy has brought a fundamental change in the housing field. The privatization of housing lead to an imbalance in the housing market. The flourishing mortgage market has contributed to the problems in the housing market due to the easy access to money, mainly due to low interest rates combined with financial innovation of lenders and investors. All this in addition to other factors has lead to economic and real estate crisis, which has left its effects in many areas. Its consequences are still visible today.

The objectives of the paper is to analyze the legal, ethical, economic and social aspects of the State's conduct in relation to the owner or lessee of real estate, when the latter finds himself in trouble and is looking for financial assistance; and to answer the question whether the conduct and the assistance provided by the State in this case to the owner or lessee of real estate is ethical and for all the same, or whether in this case one of them is in a better position than the other. Research questions were "whether the Republic of Slovenia is creating with the laws equal opportunities for both - property owners as well as tenants, when they find themselves in a difficult financial situation" and "does the state handles situation ethically and to all the same or it differentiates between the one and the others." In the study we verify with help of secondary data the eligibility of owners and tenants of property to a number of social transfers; are the social transfers to tenants of real estate an important contribution to their economic situation and for the owners of real estate are they a credit, given by the state; is for people with low incomes more prudent not to own real estate, but to be the tenants. In the study, using a quantitative method on a sample of 400 residents of Slovenia, we verified the correlation between economic and real estate crisis since 2008 and the level of everyday life of the inhabitants of Slovenia who are owners of housing and to purchase housing they took loans prior to the year 2008. The research has added value in a form of proposals for new solutions and the legal basis for the creation of legal bases in the field of real estate market and potential changes to the legal bases for the acquisition of social transfers. Based on the findings we present a proposal introducing a variety of products enriched with the requirements of appropriate control mechanisms in this field.

**Keywords:** Real estate crisis, Rental housing market, Owners housing market, Social state, Ethics

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Urban planning typologies, as proscribed in regulatory planning documents, have direct impacts on the capacity of a given property to generate revenue. Firstly conditioned by stipulated land use and secondly by quantitative planning conditions, which are both significant elements of adopted planning legislature, typology provides the three-dimensional asymptote of development possibilities of a given plot of land. In democratic societies planning legislature is adopted by responsible representative decision-making bodies. Therefore, the legal code, which is simultaneously a technical guideline, is in essence also a political document since it temporarily or permanently allows or disallows capital gains from a given property. It is also a vehicle for increase or decrease of value of neighbouring properties. The article deals with issues that are qualified by methods and procedures inherent to urban design, urban planning, architecture and engineering. These include rules for plotting and replotting, proscription of floor space index, built-up index, heights, backdrops and other classical tools of urban design. They also include acceptable tolerances for spaces, since many firmly proscribed planning conditions are often challenged in further procedures. The argument also deals with necessary preliminary steps that have to be taken before a decision is made, the decision being a new legally binding condition. In conclusion the essential step that can qualify or disqualify a speculative legal provision is discussed, namely the proper and timely obtainment of knowledge, seen as provision of evidence, various supporting knowledge, mainly concerning costs of infrastructure and the definition of payees, as well as anticipation of appeals, that can overturn even generally beneficial political decisions.

Keywords: Urban planning typology, Planned gain, Public interest
10. Possibilities for implementation of new land management system in the local sustainable development in Serbia

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Sustainable development of a local community is based on knowledge and innovation providing competitiveness and better economic results, attracting capital and raising the population’s living standard, while protecting the environment. Recognizing the developmental tendencies and capabilities of a local community is defined in the local strategic documents on sustainable development. Under the conditions of growing regional competition, local communities try to attract the investors, aiming at becoming regional centers of economic development and a part of global market. A potential resource of any local community that integrates various thematic fields over a given territory is the land. Over the past decades, the agricultural land consolidation had became a multi-purpose rural development instrument. Land consolidation used to achieve a harmonized and uniform spatial development by ensuring spatial and normative prerequisites for meeting material, social, health, cultural and social needs of the citizens. In many European countries, land consolidation presently shows its position outside the traditional field serving the agriculture, being based on sound and comprehensive planning and analysis of development processes. A multi-developmental land policy in planning metropolitan environments imposes the new land consolidation requirements. The manner in which these requirements are considered shall have a major impact on the land consolidation standing as an applicable land policy instrument in the future, being a new instrument of urban and spatial planning under the market conditions. Spatial resources are the leading factors in the economic development of any country, and the land as a fundamental and limited resource requires very careful planning and management; therefore the main objective of spatial administration is to assure sustainable development. This paper attempts to contribute the discussion regarding the possibility to use the urban land consolidation as a new instrument of local land management, remote sensing in spatial planning and geospatial data in establishing the Land Information Systems (LIS). The potential solutions and challenges are shown in the conclusions, based on the previous research and the experiences in Serbia.

Keywords: Sustainable Development, Urban Land Consolidation, Geodata, LIS
11. Value creation for User and Owner of buildings in the long user phase status so far in OSCAR project

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The objective of the paper is to present parts of the findings from research project “Oscar – Value for User and Owner of Buildings” which is going to be finished in January 2018. The main intention of Oscar is to develop competences, methods and analysis tools bringing criteria for value strategy, decided in early design, as base contribution to value creation for owner and end-user throughout lifetime, the bridge (Oscar Bridge) from early phase design to the long user phase. This paper presents Oscar project’s findings so far regarding main pillars at both end of the Oscar Bridge. The methodology, both qualitative and quantitative research methods, is used. Different approaches such as literature review, case studies, questionnaire interviews, survey and workshops has been applied for collecting data through several work groups, master -, bachelor - and also part of phd thesis. Focus in this research has been on Hospitals -, Office - and University buildings. The results reveal that it is of high necessity to get a stronger owner governance to bring value strategy and goals throughout execution process until delivery. Outcome (effect) of delivery has to be measured regardless which kind of execution process (-model) used. The research also shows the potential for improvements in different processes during the project like user involvement, regulations and decision-making. The results of the studies will contribute to better understanding on how to bring project value strategy to a measurable means from delivery of building and hence a better quality in to user phase. The research is important to increase the understanding of value creation for owner’s and user’s perspective.

Keywords: Value creation, Early design phase, Owner governance, Lifetime, Delivery outcome
12. Activity based working (ABW) – Panacea or fad? First hand experiences from three AMW pilots at a Norwegian institution for research and higher education

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Most employees at Norwegian institutions for research and higher education have their own cell offices. In 2013, a Norwegian institution for research and higher education undertook an ABW pilot study. Approximately 80 of the institution’s administrators had to move from their individual cell offices to a large refurbished ABW flex office area with free seating and clean desks. This transition from cell offices to ABW and flex offices reduced these administrators’ space consumption with approximately 20 per cent. Almost simultaneously, one of the institution’s top-level management teams also moved from cell offices to a refurbished combi office with reserved workstations and shared facilities. During the spring 2017, another of the institution’s top-level management teams moved from cell offices to a refurbished combi office with shared facilities. The research question is thus, what are these employees’ experiences with ABW? The present research is a case study, consisting of a comprehensive literature review and three cases. The first case is the large ABW area with flex offices and clean desks inhabited by administrators. The second and third cases are the smaller combi offices inhabited by two of the institution’s top-level management teams. Data was collected during the spring 2017 through observations and semi-structured interviews with 15 administrators and first hand users of the large ABW flex office area, and two top-level managers and first hand users from each of the two smaller combi offices. This study is also based on interviews with two representatives for the institution’s Real Estate Department and the architect and project manager responsible for refurbishment of the large ABW flex office area. This study has provided several findings. This study has shown that a post-occupancy evaluation some years after a transition from individual cell offices to ABW is very important both to safeguard organisational learning and to realise the payback from investments in ABW. This is a small N case study at one institution for research and higher education. Most informants are managers and administrators. Further research is needed. Among others to corroborate some of this study’s findings, and to investigate teachers and researchers’ experiences after transitions from cell offices to ABW. The take home messages from the present research are: Firstly, most of the informants who have combi offices seems to be somewhat more satisfied with ABW than informants who have flex offices. Secondly, communication and knowledge sharing seems to be more important for the informants’ perceived productivity in ABW than concentration and privacy. Finally, organisations that aim for organisational learning and payback from investments in ABW should clearly invest in post occupancy evaluations after transitions from cell offices to ABW.

Keywords: Activity based working, Combi offices, Flex offices, New ways of working, Post occupancy evaluations
13. An analysis of the suitability criteria for employees who work in food service units in hospitals and in private firms

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This study aims to provide answers to those traits which today's managers consider important for professionals working with the preparation of food. In many countries in the western world there is evidence that treatment of food are not of sufficiently good quality in hospitals. Based on this knowledge, it is important to obtain insight into the key factors (properties) employees must possess at work in hospitals and in private companies. There are some personal qualities that practitioner must have to become an outstanding professional practitioners. This study sheds light on which properties perceive as important. We have named this property “suitability”. The main method is the explorative method cluster analysis. Data describing suitability is based on open questions to leaders of 30 private enterprises producing and serving food and similarly for 30 public hospitals in Norway in charge of their own food production for patients. As a result, we received more than 200 different statements about what the respondents perceived as characteristics that featured a person who was particularly well-suited to be working with food. Based on this, we make separate analyzes for both the public sector as the private sector. The analyses gives groups (clusters) of hospitals and private companies. The essence of cluster analysis is: Can hospitals and private companies be grouped into a few groups (clusters) that are as similar as possible within, and the most different across? A main finding is that among the leaders in hospitals, we find those who largely only requested employees who are social and have good interpersonal skills, and at the same time are service minded and have empathy. A greater proportion of managers in private companies prefer workers with good technical knowledge and administrative skills, as opposed to what leaders of hospitals do. In a European context we find that it is carried out a large number of analyzes to elucidate factors contributing to professional processing of food both in hospitals and in private companies. These factors coincide significantly with the characteristics of the respondents in our analysis that have indicated as being suitable for working with food. One consequence is that if food service units in hospitals in the future are to be competitive, they must have employees who have the ability and willingness to perform a service that is as good, flexible and varied as their competitors. If not they will not be able to compete with the private catering companies and finally they will lose their job and the foodservice will be outscored.

Keywords: Suitability criteria, Facility management, Cluster analysis

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The paper discusses about the increasing quality of living approach in Kosovo, in accordance with Sustainable Refurbishment of building stock. At first, an analysis of the Energy Efficiency legislation in Republic of Kosovo in comparison with the European Energy Efficiency directives on Energy Building Performance (EPB) is given. The discussion part focus on highlighting the topic for what is the role of a sustainable refurbishment regarding living standard and ecology in Kosovo. From the literature review on the topic of sustainable refurbishment, the technical, environmental and the strategic characteristics are selected for a further study. An assessment of different documents from the case study of a building in Gjakova municipal, Kosovo is prepared for detail study research. We found that in compliance with the better legislation the new construction quality grows, the awareness of sustainable refurbishment is higher, living standard is better and environmental situation, reduction of energy consumption, CO₂ gas emission. The source of evidence in this case are data and statistics from Kosovo Agency of Statistics, legislation policy for the Energy Efficiency. Improving the EU policy and standards in compliance with legal legislation and Law for Energy Efficiency, Construction Law, energy saving, sustainable refurbishment, Energy consumption, better live. Investments in order to optimize the energy efficiency of the building stock in Kosovo. Constitution of Energy Efficiency Agency in national level and municipal, were can be improved the institutional management and Certified Auditors for Energy efficiency must continual works on the inspection and auditing procedures and standards, for all building residential the awareness of sustainability refurbishment. The strategic documents and Laws especially in Energy Efficiency sector must be improved to increased the number of building which can be the target for next sustainable refurbishment in Kosovo.

Keywords: Sustainability, Refurbishment, Legislation, Energy Efficiency, Kosovo
15. Financial justification of energy improvements in buildings

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Energy efficient building and energy efficient renovation of building are key guiding principles in building projects in the last few years. The costs of energy efficient improvements in building are still very high; therefore, particularly renovations of buildings are usually partially accomplished. Investor is faced with a decision whether energy improvements should be done on external walls, roof assembly, floorboards, windows or HVAC systems. Each of these improvements can save up to 20 or even 30% in heating cost. However, saving in cost of heating is not answering the question of financial justification of investment. The present article deals with financial justification of investment in energy improvement of external walls, roofing systems, windows and heating assemblies. As required rate of return affects financial justification of an investment, we deal with influence of required rate of return on financial justification of energy improvements in buildings. In the era of record low interest rates and consequently low required rates of return many investments seem to be financially justified, but in case of increasing interest rates and consequently increasing required rates of return the analyses could result opposite indications. This will affect more improvements with longer economic useful life than those with shorter one. Results of the research are explaining when savings in cost of energy due to better energy efficiency of building are financially justified. Presented models and findings could be used in further researches but also adopted for use in the practice.

Keywords: Energy efficient building, Improvements costs, Running costs, Useful life, Required rate of return
Revitalisation of regional railway system initiative is focused in region improvement and development of transport infrastructure and transport services. Railway investments are usually the costliest within the transport infrastructure, and especially in hard economic environment innovative and sustainable oriented projects are welcomed. From technical and sustainable point of view, it is a question how to define and to develop innovative, technical and technological advanced solutions and services in regional railway network with minimum investments in basic infrastructure and maximum added value towards advanced solutions for regional network. From the financial and social perspective, it is the matter of creating a framework, interesting for private and public side. In the research we are presenting a land value capture framework in plan strategy, by revenue models for PPP type of investments in urban city infrastructure. In this way project may contribute to urban development of degraded property.

**Keywords:** Railway; Revitalisation; Investment; PPP models
17. Intergenerational position adjustment problems sustained coexistence of young people with parents

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The reasons for remaining with parents for a long time are different, but they intertwine and connect. Extended stay with their parents on the one hand provides comfort and brings certain advantages, on the other hand is the result of the economic crisis, in which young people find themselves. More young people are unemployed and more difficult is to get a regular job, which is one of the reasons for the inability of credit and extension education. Even the real estate market for young people has become difficult to access and difficult to participate in. Young people also have become vulnerable social group in all areas and should therefore reasonable to pay more attention to young people. Young people become departure from home more and more difficult, which also brings negative consequences, such as the disposal of the autonomy and independence and for the loss of their own families and fertility. Relations between parents and children are becoming more friendly and democratic, thus losing parental authority. Extended stay young with their parents is becoming increasingly alarming. It affects both the young and their parents. The survey, which was conducted through a questionnaire which was intended only for parents whose adult children still live with them, it was examined the impact of the prolonged coexistence of parents and how they actually experience, what is the relationship between them, etc. 100 parents with young-adult participates in the research. It was found that the surveyed parents want their children to continue staying with them, move away and become independent. A majority also believes that despite the coexistence of privacy. Conflicts between them and their children who are staying with them, seldom coming, but when they occur, are the main reason these household chores and supervision and authority of parents or children. Despite the friendly relationship they have, they interviewed parents in the majority indicated that they still have authority over them, but only partially. The reasons why adult children remain in the parental home a long time are different. The main reasons are mentioned studies and financial dependence and the comforts of home and parents' financial dependency of children from them. They also believe that the state with the housing of young people is not engaged and that it is not youth-friendly.

Keywords: Young adult, Coexistence, Slovenia, Family relations, Real estate market
18. Creating Sustainability on University Campuses: A Literature Review

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The purpose of this paper is to provide an outline of how facility management influences the green initiatives of university campuses and their role in overcoming the challenges faced when achieving sustainability. The method taken was using Internet research and looking at 7 articles that have a perspective from the early 2000s to current day. This assignment looks at the strengths and weaknesses of the articles, the similarities and differences between them and their relevant theories. The conclusion reached is: the best ways to overcome the challenges associated with campus greening include: institutional commitment to campus greening initiatives, finding ways to do the campus greening at lower costs, FM should have clear communication with the central administration and with all important stakeholders, using environmental management systems (EMS), certification according to standards (ie. ISO 14001), lectures, greening the curriculum, student advocates, and government policies that encourage greening.

Keywords: Facility management, Green initiatives, University campus
19. Housing quality of elderly – the challenge for the future

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Developed world is experiencing trend of ageing. The mentioned fact requires urgent changes in economic, social and health policies, along with building and spacial adaptements for elderly, if I mention the most important policies, linked with the trend of population ageing. One of priorities for the future should become increase measures, as regards housing conditions for elderly, together with sustainable public policies. The article focuses on the challenge, linked with improved housing conditions for elderly by enabling adaptations and relevant changes of the most important parameters of culture of living as well as improvements of housing conditions. The article suggests possible solutions, which can serve as a framework of practical implementation of new policies and changed (improved) existing ones, related to trend of population ageing.

Keywords: Older population, Elderly, Demographic changes, Housing conditions, Adaptations, Well-being
20. Longterm lease as an alternative approach to current mechanisms for acquiring land needed for public roads

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The primary objective of this research is investigation into a long-term lease as an alternative to current approaches for acquisition of land needed for public roads, i.e. is lease more acceptable to both landowners and local municipality management. The research topic is addressing the discrepancies between the legal definition of public road and their actual status. The analysis of discrepancies will be performed in a few selected municipalities so that the results can be extrapolated statewide. Legal regulations regarding public roads will be analyzed as they can be one of the reasons for the above mentioned discrepancies. Slovenian and a few other countries’ case law will be compared as well. As stated before, the main research objective is to evaluate the differences between theoretical, e.g. legal code assessment, and practical, e.g. incoherent regulations or failure to comply with regulations, point of view and their consequences. A key missing piece in our current knowledge understands of the direct and indirect consequences of de facto status on landowners and local municipality management. The logical next step is developing suitable recommendations to resolve the current situation in both practical and theoretical levels in order to create necessary conditions for the public road to serve their primary focus being safe and obstacle free traffic. The final part of research assesses whether or not the lease is a suitable alternative to currently most often exercised approaches in Slovenian public roads.

Keywords: Public Roads, Land Acquisition, Longterm Land Lease, Economic Balance

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In Canada, as in almost all countries throughout the world, the population is rapidly aging. In 2016, the number of persons aged 65 or older reached 5.9 million (16.9% of the total population), for the first time exceeding the number of children (5.8 million; 16.6%) in the Canadian population. The number of ‘old’ Canadians, those aged 85 or older, is growing at four times the rate of the rest of the population, and is projected to grow from 770,00 (2.2% of the total) in 2016 to more than 2.6 million people, or 5.7% of the total population by 2051. Two-thirds of the population age 85 and older will be women. Beyond its broader economic implications, population aging, in particular among those 85 years of age and older, has important consequences for real estate decision making among older individuals themselves, their families and caretakers, individual health service providers and organizations, and the real estate development and sales industry itself. In the year 2016, one-third (32.0%) of people aged 85 and older lived in collective dwellings such as nursing homes and residences for senior citizens – by 2051, 864,000 Canadians 85 and older will living in collective dwellings, mostly in cities, and another 891,000 in apartments and seniors’ residences, accounting for more than sixty-five percent of the ‘old’ population. Most of this ‘old’ population will be concentrated in the few major Canadian cities – Montreal, Toronto and Vancouver. Formerly private home owners, this population will be moving into condominiums, apartment and commercial dwellings. In these larger cities there will be a strong demand for the development of condominium, apartment and commercial dwellings and other real estate options that recognize the personal preferences, household status, physical limitations, retail preferences, health care requirements and financial resources of what will be a largely female, financially resourced population that will, for the first time, live to be 100 years of age or more. There is a critical need to identify real estate planning, development and construction models that will reflect the needs and preferences of this rapidly growing ‘old’ population and market. This paper will explore and identify the factors that need to be included in such a model in order to accurately plan such housing, to ensure long-term sustainability, and return on investment.

Keywords: Population ageing, Health care, Real estate decision, Canada
22. The question of social housing in the suburban context: A beare of diversity for peri-urban?

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Collective social housing and suburban pavilions are two forms of housing that have dominated in recent French history, in urban and peri-urban reality as much as in political and academic discourse concerning housing and the urban in general. They are two forms of habitat that are rarely associated and almost never imagined to coexist (with social housing blocks and individual suburban pavilions serving as counter-examples one of the other). However, French urban policies of the recent years oblige us to reflect upon the possible relations and intersections between them. These reflections are imposed and at the same time inscribed, within a legal and policy paradox: the law “SRU” in 2000 puts forth an urban policy that prescribes a quota of social housing within the total housing stock of local municipalities, while in 2014 law “ALUR” seeks to limit suburbanization and urban sprawl by promoting a policy of facilitating suburban densification (thus encouraging the multiplication of private housing). It is a conflict between the social and the environmental preoccupations of the French State, leaving local governments responsible of enforcing contradicting policies (increase of social housing quota against private housing multiplication). Within this context, this article analyses the social and political justifications used in contemporary France in order to promote social housing, which are mainly the right to housing, and the issue of social diversity of neighborhoods. Subsequently, the relevance of these discourses for the suburban context is interrogated. There are certain successful social housing projects that have been implemented in pavilion neighborhoods in the recent years in France, but they remain marginal examples. The organization “SNL” (an active producer of social housing in the Parisian suburbs) is taken as an example, and the reasons of their marginalization on the national scale are examined. Furthermore, this research profits from a case study of a suburban housing estate, in the suburban territory of the city of Aix-en-Provence, which is currently facing pressures to densify. The pertinence of social diversity and of social housing construction is interrogated for this specific allotment and neighborhood. Finally, this paper opens a discussion on possible methods of resolving this contradiction between social housing and suburban densification policies: Through a thorough sociological understanding of the nature of each suburban context, and through inclusive and participatory processes of social housing construction (when the context proves productive), it may be possible to propose relevant and successful answers for the social and functional diversification of the suburban territory.

Keywords: Urban policies, Social housing, Social diversity, Suburbanization, Peri-urban, Pavilion housing
23. Analysis of individual and structural factors in the coexistence of young (families) and parents

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Keywords: Mlade družine, Stanovanjska politika, Individualni dejavniki, Strukturralni dejavniki, Slovenija
24. Estimation of facilities construction cost using radial basis neural network

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Achieved construction cost can affect the facilities project participants’ business, so the decision what cost to sign in a contract for a new facility construction is a quite responsible decision. In addition, the process of facilities construction is influenced by numerous changeable factors which increase the complexity of the decision about the construction cost. Therefore, having a model for construction cost prediction is of particular interest. This paper proposes a model for facilities construction’ cost prediction which can lead to construction cost estimation improvements during the construction contracting process. Data for sixty five facilities construction projects were used as input for the DTREG predictive software to develop a model for construction cost prediction. The data used were: real construction cost, contracted construction cost, real construction time and contracted construction time. The predictive model developed in this paper is a combination of process based and data driven model. The Bromilow’ time-cost model was used as a process based model and the Radial basis function neural network (RBF NN) was used as a data driven model. The combination of these two models gave better prediction results than using only one of them. The model has the mean absolute percentage error (MAPE) of around 0.639%. The coefficient of the determination R2 for the model, which represents general fit of the model is around 99.21%, and the coefficient of correlation between the actual and the predicted cost is 0.996. The general conclusion is that historical data for construction cost are useful for developing models that predict construction cost. The model presented in this paper can be used for construction cost prediction and as an experience for developing other models.

Keywords: Construction cost, Facility, RBF neural network, DTREG software, Bromilow’ time-cost model, Process based models, Data driven models
25. New integrative approach for sustainable regeneration of the historic Medina center in the metropolitan cities – Case of Algiers

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We experiencing today a rapid and a dramatic change in our world considered to be faster than ever. Many changes appear to be related to what is called ‘globalisation’. Tarrow and Hall (1998) stated that: "Every era has concepts that capture the public imagination, and globalization has recently emerged as one of our time.” In North African region; globalisation and rapid urbanization have a huge impact on various dimension ranging from social, economical to cultural once,..., the importation and massive implication of already available solutions together with the impact of colonialism had a direct input in the interruption of local consistency; in the case of Algiers; the example of segregation between tradition and modernity is not only clearly visible in spatial structure and visual form, but also in urban marketing activities, as well as in general strategic planning. The polarizing approach does not seek compromises, but focuses on the best features of the two poles, creating ambiguous identities, which are justified by different uses and target groups. However, these two forces in certain cases inevitably overlapping bringing questionable design which as architects and urban planners has to find solution and appropriate compromises to it. In any case, past and architectural heritage today has to serve as an important element for strategic future planning and has to play a crucial role in the reconciliation between the two poles; but how? We consider that the dependencies are certainly very complex, but one of the most important features of the cities is the changing and negotiating of compromises; a suitable compromise is deliberately required through planning. Since cities tend to maintain their existing identity on the one hand, and on the other hand strive to enrich it with some additional elements, with global ideas playing an important role, the transformation will usually occur as a continuous process. In essence, this paper is an investigation for an appropriate interpretation of regional architecture through a regenerative approach ‘on the urban scale’ aiming not only on the renewal and the preservation of traditional achievement as a way to reinforce urban identity but also on the set of new means and alternatives to formulate a bridge of reconciliation between the traditional and modern parts using urban pattern within the context of social, cultural permeability as a way to attain an effective and successful regenerative process and set the basis for a future urban identity particular to the local cities.

Keywords: Sustainable regeneration, Historic centre, Architectural heritage, Medina
26. Alternative workplace design – changes from residential building into a workplace

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The aim of this paper is to explore if there could be an alternative workplace design for a building in Asker kommune, that could offer a solution better suited for the tenants. The study reviews some of the literature on office design and its impact on the employees working in different workspaces. Through a sight inspection and a semi-structured interview, the problem areas with the current design were identified. From the literature review a range of different aspects that impact how different workplace design is perceived and accepted among employees is found. From the research, it is found that the users of the premises in Asker kommun are part of an organization that works with people in different settings such as phone calls, visits and at the office. As the visits make up to ca 40% of their job, it means that ca 60% percent of the time the tenants are using the premises in different ways. Considering that the current premises do not allow the tenants to have their own private cellular office, it has been suggested to refurbish the premises to a combi-office. This workplace design aims to take confidentiality and privacy into account but also to facilitate concentration as well as collaborative work for the tenants by assigning focus and collaborative areas. This design will make room for some of the desired specifications of the tenants. The solution is just one of several possible alternatives.

Keywords: Facility management, Workplace design, Combi-office, Workplace, Space management, Work facilities
27. Facility management and university facilities – the added value of FM and its role in students satisfaction

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The purpose of this literature review is to examine the added value facilities management can bring to high educational institutions (HEI) and what factors influence on student satisfaction. Further, it aims to present some current and future challenges FM faces in university institutions. A literature search was conducted in HIOA’s database Oria and research publisher Emerald. The search for relevant articles was based on “university facilities”, “facilities and high education”, “university”, “facility management university” and “facility management university facilities”. Other articles were found through bibliographies of relevant articles. Results of the literature review show that FM plays a significant role for the learning and teaching aspects of an university, and through maintenance and development of the facilities FM can contribute to added value. Moreover, good facilities contribute to student satisfaction as well as attracting and retaining students and staff. Students whose needs are fulfilled will most likely help strengthen the university’s image through word-of-mouth, which ultimately results in added value to the HEI. This way FM can contribute to competitive advantage and marketability for the HEI. FM can also contribute to a more efficient operation of the facilities, resulting in cost reduction. However, FM faces internal and external challenges now and in the future. As funding is the biggest problem of FM departments at universities, it is important that each FM department develop a clear strategy to present to the university board to make them aware of the added value FM can bring to the institution.

**Keywords:** Facilities management, Facilities manager, University facilities, High educational institutions, Added value
28. The analysis of change management theories through implementing phase

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The purpose of this paper is to get an overview on the subject change management, and to pinpoint important models and theories that can be used in organizations that faces changes. This paper discusses two change management methods, which are investigated more thoroughly, Lewin’s “change as three-steps” method and Kotter’s “eight-steps to transforming an organization”. The change management literature can be divided in different areas with similar characteristics. Both methods, Lewin’s and Kotter’s, were discovered to have challenges. Lewin’s model may seem too little complex, and Kotter’s model may also not cover enough ground. By using Kotter’s model as a guide, and complement the model with other theory from the change management field, it will increase the probability of a successful outcome of the implemented change.

Keywords: Change management, Organizational change, Organizational development, Business processes
29. The role of Navy of Kingdom of Yugoslavia in April war in the year 1941

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In this scientific research we tried to show the role of Navy of Kingdom of Yugoslavia in April War in the year of 1941. All together with all the battles it participated for the preservation of territory and defence of civilians from aggression. Research bases on more individual events who marked that war and also the heroic deeds of commanding officers, non-commissioned officers and soldiers who did not step back even in front of more numerous enemy units. Methods we used are historic and research method from available literature. The aim of this research work is to break away from oblivion all heroic deeds done by units and individuals and to show that even if the defence of country was not so efficiently conducted, individuals somewhere made to inflict the damage to enemy and to slow it’s advance into Yugoslav territory.

Keywords: April War, Kingdom of Yugoslavia, Navy, River Flotilla, Aleksandar Beric, destroyer Zagreb, the fall of the Kingdom of Yugoslavia
Factors explaining building projects’ success and failures

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Do different categories of building owners’ use different project models? Are the project models differentiated according to the buildings’ character and type of building project? Are there connections between the buildings’ total costs and type of contracts used? What are the most important reasons for choosing the particular project models? Are there any connections between the building owner’s specific and measurable requirements and the building project’s value creation for owners and users? Are there connections between project models; i.e. the combination of tender, contract and building contract, and the project’s outcome? The present research is based on a cross-sectional large N observational design. Data were collected through a national online survey in Norway from June to September 2016 (N = 1034). The questionnaire was developed in cooperation with important stakeholders and pretested on various actors involved in building projects. The respondents (80 per cent men and 20 per cent women with an average of 15 years’ professional experience) are representative for those involved in Norwegian commercial and public sector building projects. The data have been analysed with IBM SPSS version 23, mainly through descriptive statistics and cross table analysis. Different categories of building owner use different project models. Project models are differentiated according to the buildings’ character and type of building project. There are connections between the buildings’ character and total costs and the type of contracts used. There are connections between the building owner’s specific and measurable requirements and the building project’s value creation for owners and users. Finally, there are connections between project models and outcome. This is a large N survey among Norwegian public and private sector professionals involved in building projects. The results may have a slight success bias since more than 50 percent of the projects were reported to perform above average. Further research is needed, preferably similar studies in other countries to facilitate comparison across borders and cultures. The present research is one of few large N surveys among Norwegians in private and public sector organizations involved in building projects. The findings provide a first glance at factors explaining successes and failures in construction projects.

Keywords: Building projects, Organization, Owner governance, Success criteria
31. Facilitating independent living elderly in rural areas – A changing role for care organisations

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This paper aims to explore the requirements for facilities and housing of independent living elderly in rural municipalities in the Netherlands, to support care organisations in their changing role of providing facility services and facility products to this group. The qualitative study builds upon seven expert interviews to explore the complex field of facilitating ageing elderly in rural areas. Furthermore, the study involved 21 structured interviews with ageing elderly in the rural area of a Dutch municipality in Hof van Twente region. Finally, a brown paper session was used with managers of a large care organisation in the Hof van Twente area, to explore the research subject from a facilities business model point of view. The findings show that there is a development towards the demand for custom-made facility services to support independent living elderly at home in rural areas, because these lack sufficient community facilities. Care organisations could contribute to this with new, innovative business models to offer sufficient facilities and housing services. Nevertheless, this requires that a care organisation operates as a well-known and reliable partner in the social network of the elderly in the several neighbourhoods in the municipality. New facilities and housing services require social innovation and are preferably developed and delivered in co-creation and cooperation with the elderly people and other stakeholders neighbourhood. The findings of this study can be used by facilities managers of care organisations to support decision-making concerning delivering facilities and housing services for elderly who live independently in rural areas.

**Keywords:** Rural areas, Socio-economics, Facilities management, Housing, Ageing elderly people, Care sector
32. The relationship between school building and the pupils’ learning performance in primary education

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Real estate in general can be considered the fifth business asset of an organisation, beside capital, technology, know-how, and employees. Seen from its functions, real estate can add value by (1) increased value of property, (2) marketing, (3) increased innovations, (4) increased satisfaction of employees, (5) increased productivity, (6) increased flexibility, and (7) reduction of costs. The stakeholders of housing of primary education are: municipalities, school boards, employees, parents/children, and the environment. Not all the possibilities to add value to an organisation are relevant for all the stakeholders of primary education, but the increase of productivity certainly is relevant. This is why it is interesting to find out if, for primary education, there is a relationship between the quality of the school buildings and the pupils’ learning performance. The main question in this research is about the relationship between the quality of school buildings and the pupils’ learning performance in primary education. In the first part of the research available data according to the learning performances was analysed. After that, the results of the 15 most positive and the 15 most negative performances of schools were linked to the data about their buildings. This part is based on deskresearch. After that a questionnaire was sent to the managers of the 30 involved schools. This questionnaire contains 61 questions about different subjects that determine the quality of school buildings. The research has shown that the housing of the category of schools with positive deviating added values is relatively younger than the schools in the other category. A newer school building thus can contribute to the quality of education housing and the quality of the school. The research within the thirty selected primary schools has shown that schools with a positive deviant value added scored a higher number of points for the quality of the building then the schools in the other category. There is a clear relationship between the physical environmental factors of a school building and the pupils’ learning performance. The basic quality requirements that are often lacking in the buildings of the negatively deviating primary schools, are daylight and ventilation. This study shows that these topics are the most important when assessing the quality of school buildings.

Keywords: Corporate real estate, Added Value, Primary education, Stakeholders, School buildings, Learning Performance
33. Intended life-length of a Norwegian house

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How long a house serves its purpose (or altered purpose) depends on several factors, such as maintenance and the quality of the materials/technical solutions employed. Little research seems to have been carried out, however, on how the intended life-length of houses influence their performance. This paper examines the intended life-length of houses within the Norwegian context as expressed in official rules and regulations. The study is based on a hermeneutical content analysis of rules and regulations operative in Norway. A top-down approach has been chosen, with most emphasis lain on the main acts and technical regulations, with other directives being scrutinized in particular for observed lacunas. There appears to be no consensus and further little discussion concerning the intended life-length of a house in Norway. The Planning and Buildings act underline that “sustainable” solutions are to be chosen, without any form of quantification. Some technical sectors (e.g. concrete works and electrical installations) have established their own regulations. These are, however, without any discipline crossing coherence. The only common denominator rests, in fact, the guarantee time a client has towards the contractor, notably five years. Without a coherent understanding of the intended life-length of a house, the understanding of what solutions to choose – and how to maintain them – rests highly unclear. This leaves the door open for unethical solutions, unskilled labour and little control over the building process. There ought as soon as possible be worked out a common (legal) understanding of houses’ intended life-length.

Keywords: Building regulations, Gaming, Sustainability, Climate change adaptation
34. Feelings of neighborhood safety in living environment

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We live in a time, when the security and the sense of security are important factors of each individual as well as society as a whole (burgaries, robberies, terrorism, crime and other threats to people). There are number of factors, which contribute to the security of the country and the related-security of citizens. In recent times the security situation in Slovenia mainly revolves around economic factors. At this time the security is understood more in terms of the self survival and related to limited financial resources. We are interested how demografic factors such as gender, marital status and type of settlement affect the influence to the perception of security threat in Slovenia. We are focused on people who live near the border, in cities Nova Gorica (Slovenia) and Gorica (Italy). We would like to know, how the feel of security affects on purchasing decisions of real estate. We are interested in how people trust the government. The results show that the safety is increasingly becoming a task of each individual trying to establish partnerships with pluralist institutions of formal social control. Security is a circular aspect of citizens’ lives. Insecurity of any kind is a source of fear and worry which can have a negative impact on the general quality of life. It implies uncertainty regarding the future which may have a negative impact on the potential real estate purchaser. The economic crisis have shown how important economic safety is for quality of life of Europeans, as the feeling of vulnerability can drastically reduced the sense of personal freedom.

Keywords: Security, Demographic factors, Settlement, Slovenia, Italy
35. Impact of the reputation of the neighborhood on purchasing decisions of potential buyers

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In recent years, a number of changes have taken place, affecting the way people live. Technological development, changes in the way of life itself, a stronger self-awareness and distinct individuality, along with a rise in standard of living and many other factors, have led to changes in the perception living environment. Many neighborhoods that were once built were intended for industrial workers and their families. The concept of these neighborhoods has become obsolete from today's point of view, as it does not include the parameters used by today's planners. Nevertheless, for a large part of the population life in such neighborhoods is the only possible form of living. In the neighborhoods that were built during the post-war period and thanks to the "uniformed" architecture, they are unattractive, and today, in particular, there are households with lower incomes. Because of the lack of functionality, age and other factors, households with higher incomes decide for residence that meets their needs and expectations. This causes the emancipation of a more economically viable population, which in the long run can lead to social problems. The purchase of a property is one of the major and the important life projects for the average person (family). Before making an important decision, each buyer asks, among other things, what he is expecting of the purchased property and whether the property will meet his life needs. The article examines the influence of the reputation of the neighborhood on purchasing decisions of the potential buyers. A reputation is a concept that is subjectively experienced by every individual for himself. The reputation of the neighborhood is composed of various factors. Respectable neighborhoods contain all important infrastructures, a higher level of comfort, safety, belonging and recognition to the population. The results show that buying a property in more respectable neighborhoods also represents a unique status symbol with which the buyer non-verbally tells who and what is. The results also show that the reputation of the neighborhood projection is created by or intended to create an individual (or group of people) in order to impress the observer.

Keywords: Reputation of the neighborhood, Shopping decision-making, Potential buyers, Subjective experience, Status symbol
36. Transfer of young people (families) into their independent apartments – solving a housing problem

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We are interested in whether the vast majority of young people (families) live independently in their own homes or still live with their parents. We have found that most young families do not live independently in their own homes, but rather live in their own or partner's parents. Nevertheless, they believe that living with parents is currently a suitable residence, which is an interesting finding. We have also found that young people, as the main reasons for an independent status, do not mention a small number of financially affordable housing and employment policies (problems in the labor market, employment), but the benefits they receive by staying with their or partner's parents. Contrary to some of the starting points in other studies, the analysis shows that the dependency of young people (families) can’t be initially linked to the employment policy (problems in the labor market, employment) of young people (families), but this kind of stay is also linked to the benefits that younger generations get cohabiting with a generation of parents (e.g., laundry, cooking, babysitting, paying expenses). We also find that most young people (families) count on the help of parents and relatives in solving the housing problem, rather than the state with its regulatory measures (housing policy). We investigate whether the stay of young people (families) and old indicators of good intergenerational coexistence and solidarity is more or less an indication of the economic situation in Slovenia. In the survey, we found that the respondents strongly agree with the assertion that the uncertain economic situation will prolong the intergenerational coexistence. To the minimum, the respondents agreed that intergenerational coexistence is in the most cases the result of choice or decision, for example, the desire for coexistence and good relations between the generations. In any case, we found that the majority of the respondents think that the combined residence of young people (families) and the old ones is cheaper for everyone, which nevertheless indicates a connection with the financial status and the availability of economic goods in the country. Intergenerational relations are very much based on the family tradition and, lastly, to take care of older relatives. We also found that elderly respondents, to a lesser extent, indicate lower costs as the first reason for intergenerational coexistence. Young people, however, state that a common stay is cheaper and more beneficial for all, since young people (families) benefit the elderly (care of children, help with household tasks, etc.) and thus they live more comfortably and better (they have more time for themselves).

Keywords: Young, Old, Intergenerational, Housing, Extended coexistence
Security has always been a primary focus in facilities, and the ever-increasing risk of facilities becoming targets for terrorist acts makes the need for security even more critical. The purpose of the paper is to illuminate the role of facility management with the focus on security today and in conjunction with the increased risk of facilities becoming targets for terrorist attacks. Based on these findings, highlight aspects considered essential for facility security management today and in the future will be identified. After a thorough review of selected documents, some aspects related to today’s facility security management were identified, and two findings were considered especially interesting: 1. Facility security management has been put in a stronger searchlight in organizations as a result of the increased terrorist threat in and around facilities. 2. Facility security management is taken seriously today more than ever, but it is still difficult to implement the security measures needed in organizations. One of the reasons is the huge cost linked to secure facilities against terrorist attacks. The results emphasize that safety in facilities has a great potential for improvement. Aspects that can be considered essential for facility security management today and in the future, can be presented using the model for design and evaluation of physical security systems presented by Garcia (2007). The model is continuous and includes four stages; identification, understanding, development and evaluation and reassessment.

Keywords: Facility management, Security, Model
38. The influence of self and functional congruity on real estate purchase options in Slovenia

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The article covers the influence of personal and functional congruity on preferences and real estate purchase options. Functional congruity means that the greater the congruity between the perceptible user properties of the dwelling (in terms of residential areas intended for sleep, daily living, eating and maintenance, the cost of the purchase and maintenance of the dwelling) and the purchaser’s desired dwelling characteristics, the greater the likelihood that the purchaser will be motivated to purchase the dwelling concerned. By means of empirical research, researchers have determined that, in addition to the functional congruity, personal congruity or self-congruity also influences preferences and real estate selection. Self-congruity is defined as the degree of congruity between the image of the product and the purchaser’s personality in terms of the symbolic meaning of the product. Self-congruity affects the selection of the product in a positive sense – namely, the greater the self-congruity with the image of the product, the more the purchaser is inclined to purchase the product. Self-congruity has several dimensions. There are at least three concepts of self-congruity that explain and predict the behaviour of the consumer: actual self-image, ideal self-image and social self-image (Sirgy, 1982, 1985). Sirgy also introduces a fourth concept – namely, the ideal social self-image (Sirgy, 1991). With our empirical research, we tried to determine whether there are any statistically significant differences between functional and personal congruity in connection with potential purchasers in Slovenia. We established that potential purchasers show statistically significant differences between personal and functional congruity. In addition, we determined that the most important of the three forms of self-congruity (actual, ideal and social self-congruity) in Slovenia is ideal self-congruity.

Keywords: functional congruity, actual self-congruity, ideal self-congruity, social self-congruity
39. Determination of the characteristics of the faults in the settlements with earthquake risk by satellite images: Sındırığı and Surroundings (Balıkesir, Turkey)

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The distances, locations and earthquake potentials of the faults especially located in the earthquake-bearing regions are the subject of debate. Since field observations are difficult to be made in zones where residential areas are concentrated, additional study methods are needed. This is because traces of structural elements such as faults cannot always be seen clearly in the field. In such cases, satellite images can provide preliminary information on the extent and location of the faults. The study area includes Sındırığı and surroundings (39°05'–39°15'N / 28°00'–28°30'E). In this study, the characteristics of the faults which have the potential to create earthquake around Sındırığı were tried to be determined with the help of LANSTAD satellite image. On the LANDSAT satellite image, the band combinations suitable for such research are used. In addition, filtering process on satellite images has also been applied perpendicular to the general directions of possible faults in the study area. Also, the earthquakes that have occurred in the recent history of the region have been examined and attempts have been made to determine the faults where these earthquakes have occurred. The magnitudes (M) of these earthquakes are investigated from the surface to the depth and the earthquake generating potentials of the existing faults are examined. With seismological studies, all the earthquakes from 1900 to the present has been scanned. As a result, the presence, lengths, locations and potentials of earthquakes in a settlement site (Sındırığı, Balıkesir) have been tried to be determined through multiple methods. Thus, possible earthquake risks of existing residential areas and settlements in the study area were examined. This study was supported by project number ÇOMÜ-BAP- FBA-2016-809.

Keywords: Settlement, Earthquake Risk, Fault, Satellite Images, Sındırığı.
40. Ten years of burden economic crisis situation – lessons learned from an occupational health perspective

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The article analyses the influence of the economic crisis on the occupational health. Research on workplace health promotion, job stress, high performance workplaces, strategic human resources management and leadership styles congregate around the importance of supporting employees to be effective in their jobs in ways that promote their health. From the systematic review, it is evident that job insecurity is associated with many diseases connected with depression, heart disease, suiciding situation. During the hard, economic ‘factor of production’ had number of effects on the workplace, such as: job insecurity, work intensity, temporary uninsured work, violence and harassment, absenteeism and presentism due to occupational stress. Economic downturn caused a prolonged increase in suicide mortality. The present research focuses on the literature review analysis of specific elements of the work environment and behavioural habits of employees at their jobs with the aim to discover the characteristics of the workplace that have the most effect on the individual.

Keywords: Economic crisis, Occupational health, Workplace
41. Critical factors associated with road projects resilience to the economic environment – cases from Norway and Slovenia

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Norway and Slovenia have different traditions in delivering transport infrastructure projects by Public Private Partnerships (PPP). The paper presents an analysis of three finalised, both public and private road projects, via a framework that conceptualises the transport infrastructure as a system characterised by key typologies: implementation and transport mode context, business model, governance and funding and financing scheme, and one that produces specific outcomes. Conclusions are drawn on the critical factors associated with the projects’ respective successes and/or failures, as well as their resilience to the unfavourable economic environment.

Keywords: PPP, Success factors, Failure factors, Norway, Slovenia.
42. **Trust in a viable real estate economy with disruption and Blockchain**

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Does real estate still have the value that it once had, or will the valuation of real estate change due to surprising products and services, innovative business models, different market strategies, innovative ways of organizing and managing in the (real estate) markets? Innovation revolves around good facilities in an attractive and stimulating environment. Take disruptive real estate. The driving force behind these developments are new technology, viability, organizing differently and managing, and these have a big impact on the valuation of real estate. Established names like Nokia, Kodak, Blockbuster, Oad, Free Record Shop, Hyves and V&D collapse, and others, like Hema, Shell, hotel chains and healthcare institutions are the least bothered by it. However, disruptive organizations like Amazon, Zalando, Uber, Tesla and its competitor Faraday Future, who wants to exceed Tesla in everything, clearly respond to viability in the environment, and this is determinative for competitive strength and thus impacts the current and future valuation of real estate. Blockchain – a distributed database that contains a growing list of data items and that is hardened against manipulation and counterfeiting - plays an important role in that. The notaries and brokers have already experienced this in the recent period, and it will continue to have an effect on real estate owners, financiers, users, builders, brokers, notaries and the cadastre. The real estate world finds itself at a tipping point of a transition: a dramatic and irreversible shift in (real estate) systems in society. This article is a State of the art of Disruption, Blockchain and Real Estate in the Netherlands and international.

**Keywords:** Disruption, Real Estate, Blockchain, Trust, Value
43. Logistic system balancing of servicing home-care in urban areas and surrounding villages

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Home care is supportive care provided in the home, mainly offered by licensed healthcare professionals who provide medical treatment needs or by professional caregivers who provide daily assistance to ensure the activities of daily living and hospice care. For these purposes, Europe is developing new long-term care systems, which include the ideas of deinstitutionalization, where provisions of services are changing place from institutional environment to homes of patients. After the study of time, available for servicing, spatial dispersion of facilities and homes of older people who are included in a home-care, such system of health and social services needs to undergo some balancing of activities for optimal allocation of nurses to the supply network. When technology is changing rapidly, the services can be provided in a more effective way and higher agility is required. The spatial dispersion of housing should be particularly considered in planning of the built environment and other new facilities for seniors. Namely, logistic costs per capita are increasing by increasing the dispersion, while there is decreasing density of homes in the functional regions where services are provided. Feasible scheduling and optimal routing are essential for an acceptable trade-off between logistic costs and satisfaction of clients. In our study, we optimize the home healthcare routing and scheduling to balance the necessary workforce and service time requirements at given clustering of homes in the given functional region. The model is based on the ideas of solving the nonlinear balancing problem developed in industrial engineering for line balancing, also known as assembly line nonlinear balancing problem. Mathematical method for line balancing is formalized on the basic idea of the Patterson and Albracht algorithm (1975), where nonlinear problem is linearized to be able to formalize it as a linear programming problem. Here fixed cycle time is relaxed, the operation time is an integer deterministic value. The method for evaluation of the precedence diagram is studied additionally while other balancing procedures follows the similar phases as at Petterson-Albracht algorithm. This mathematical programming tool enables us to study the outputs of various scenarios very rapidly, therefore it might help professionals to be prepared in advance for the coming changes caused by the growing number of seniors and changes of technologies.

Keywords: Housing, Home care, Scheduling, Routing, Spatial dispersion, Functional region
44. Housing Equity Withdrawal in the Portfolio Choice for Financing the Long-Term Care Facilities

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Across the European Union, currently, 40 million older people are dependent on the help from others. This number will rise to 55 million until 2060. Human dignity and the respect for human rights guide the European Member States to implement adequate reforms of long-term care systems (LTC). Following the provisions of the UN Convention on the Rights of Persons with Disabilities and the European Convention on Human Rights, we should implement measures reinforcing the transition from institutional to community-based services. The process is named Deinstitutionalisation. It requires to build new facilities for seniors and to remodel their homes adapting for the persons with declining functional capacities. We have calculated how much it will cost and what would be the possible financial sources to cover these expenses, on the bases of the National Health Institute database. In our study, we developed the model of adaptation of different facilities to the functional decline and wishes of seniors and calculated the needed monthly premiums which are payable for 40 years, from age 25 to 64 to cover expenditures for the long-term social care. We have combined these financial sources with potential. Housing Equity Withdrawal (HEW) from homes of seniors who are owners of their home. Therefore, in this article Equity Release Schemes have been studied in the context of the Long-term Care Insurance and behaviour of the land rent. We have compared the insurance schemes based on HEW and insurance schemes with monthly premiums from their gross salary. ERS could transform fixed assets in owner’s occupied dwellings into liquid assets for LTC. We have shown how the interest rate variation, which can reduce the income of older persons even below the targeted quality of LTC, has a significantly smaller impact on welfare of the elderly if these sources, which depend on a volatile interest rate and which have a positive covariance with the interest rate, are combined with the ERS loan model, where the correlation coefficient is negative. Because of the volatility of the interest rate the proper combination of annuities paid from their gross salary and dynamics of ERS drawings has to be planned to decrease the volatility of combined cash flows deriving from both pillars. Therefore, it is wise making a trade-off between these two schemes. The calculation based on the data of average value of a home owned by seniors and the costs of LTC consisting of the average costs of care in both four categories of LTC, where the facilities are adapting to these categories are giving the optimal portfolio for LTC in Slovenia. The numerical example is based on the German Mortality Tables DAV1994R, as required by Slovenian Agency for Insurance Supervision.

Keywords: Housing, ageing population, Housing equity withdrawal, Equity release scheme
45. The problems of farm definitions for the needs of the implementation of tax policy

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According to the Forestry Institute (ZGS) in Slovenia, more than 313,000 forested land is owned by as many as 461,000 forest owners. Similar fragmentation is also characteristic of agricultural land. In Slovenia, more than 420,000 households, whose members own or use agricultural and forest land, are liable for personal income tax from these land (due to the exemption for all households with a maximum of EUR 200 of income from basic agricultural and basic forestry activities) About 70,000 households or about 95,000 people. All these households are considered to be rural households in accordance with the Personal Income Tax Act. Almost a quarter of the population of Slovenia is faced with tax legislation in the field of agriculture and forestry. In the paper, the tax regulations will be presented governing the field of agricultural and forestry activities and, on the case of selected farms, examine the consequences of the existing regulation for taxable persons performing basic agricultural and basic forestry activities.

Keywords: Property, Agricultural land, Income Taxation.
46. Mapping of Facility management maturity profiles in Norwegian Universities and University colleges

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The purpose of this research is to identify and measure FM performance and maturity in the Norwegian Universities and University colleges regarding: strategy, standards and policies, financial planning, investment appraisal, provision of service, organizational maturity and handling of data. This research is a case study with the combination of a qualitative and quantitative research method. The backgrounds of the organizational structure in the universities and university colleges, which participate in the research, are given. 11 (44%) of 25 (100%) heads of FM units answered the assessment. The data collected was analyzed and compared with the FM maturity matrix levels and the theoretical literature review of the important FM key performance indicators. The FM maturity matrix used in this study provides some good guidelines and expertise. The findings reveal the presence of FM strategies in universities and university colleges in Norway. The FM organization may not be fully integrated and communicated with the core business and the property owners. Most of the heads of FM units are aware of a need to develop better property and FM services integration to contribute creating values for the building’s owners and users through its lifetime. Some of the found lack of FM standards and policies understanding and implementation in these organizations, but it’s expected to improve. The FM performance management in most of these institutions is still based on the user complaints. Measuring PM and the use of FM technologies are also limited. The misunderstanding of the FM role in some institutions is spotted, as some of the heads deal with Property management responsibilities. The Maturity mapping model shows the potential, but it should be prepared more specifically for the Norwegian FM practices and work environment.

**Keywords:** Facility Management, Facility Services, Performance management, Facility management strategy, FM maturity matrix.
47. The impact of fiscal policies and community services on housing market dynamics and urban land rent in crisis – The comparative analysis between Florida and Spain

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Florida and Spanish coastal areas are two major destinations, where American and European citizens, mainly older persons from North of these two continents, are buying properties where they intend to move when they retire. Therefore until 2007, the flow of older inhabitants to the south was increasing rapidly, influencing the dynamics of housing construction. For example, in 2006 only the yearly growth of transactions in Spain was 30%, but after the crises, the inflows were fallen, and a yearly number of all housing transactions since 2007 till 2014 has fallen more than 30%. The flow of foreign buyers participates to the housing transactions more than 17%. When total number of all transactions in Spain was also decreasing in the time window 2012-2016 with minimum in 2014, so that the index 2014/2012 was 47 only, the value of these transactions with foreign buyers was growing again since 2012 from $6.4 \cdot 10^9\, eur$ to $11.6 \cdot 10^9\, eur$ in 2016, which means more than 1 % of Spanish GDP per year (Observatorio de Vivenda y Suelo no. 21, 2017). The tax policy and communal services in both continents influence this intensity of flows. In the paper, we shall present how some factors influence the urban land rent and its capitalization in Spain and Florida, and also how fiscal policies and the communal services should be improved to increase the value of transactions or the net present value of housing rents. The main results show that the land rent and the value of transactions in the area where communal services for older persons are more developed could nearly double. In the USA they have not introduced the real estate transaction taxes while in Spain the transaction tax is determined by region and is equal to 7 % - 8 % (At Murcia region is equal to 8 %). We have found out that the proper fiscal policy enables to adapt the housing market in case of volatile economic growth. Therefore this financial flow could be more stable and the time windows in a period of economic decline and crises which influence badly on housing market can be reduced substantially. This conclusion is important also for industrial engineering sector which can contribute to better communal services by organizational schemes which reduce the prices of facilities and other services to older inhabitants at the same costs of logistics for seniors, which could contribute to the higher attractiveness of locations for new buyers and tenants.

Keywords: Housing market dynamics, Fiscal policies, Urban land rent, Crisis
48. Critical overview of approaches to evaluating real easement – the case of Slovenia

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In the article we find that the valuation of real estate burdened with real easiness, depends how the easement will affect the real estate, what is its further use, where the easement is located, how long the easement lasts and whether the easement can be removed and how much that will cost. It is important, what kind of interference in setting up the easement; the question is whether the owner may use the land under the easement or whether it is related to permissions, contractual arrangements. The identification and the interconnection of the main rights with the easements in the real estate is therefore crucial for the evaluation. We used the method of systematic approach in the following steps: the research assumption by stages, the definition of inclusion criteria and the search and the selection of studies. We have found out that the determination of the easement value can be divided into three phases: i/ Stage of easement (construction); ii/ The real easement itself, iii/ The burden (usually negative) that burdens the actual easements (eg. noise, dust, shading, etc.) on the dominant property. An overview of the approaches and the methods shows certain compatibility and intertwining, but certainly, the research in Slovenia breaks down the myth about the “method of thumb” and the overall 30% decrease in the value of the land is due to the real easiness.

Keywords: Real estate, Valuation of real estate, Real easiness, Slovenia