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Regional profile

Croatia

1 Introduction

The CrowdStream project

CrowdStream's main objective is to improve the effectiveness of public/private business-support for innovative spin-offs & social enterprises to access qualitative alternative financing (crowdfunding). The main project result will be improved cooperation between business-support-organisations and enterprises to guarantee a qualitative access to crowdfunding in the Danube region.

Crowd Stream outputs:

- ✓ Strategies for alternative finance (crowdfunding) in the Danube Region
 - Regional Action Plans
 - Policy recommendations for the region
- ✓ Quality tools for crowdfunding
- ✓ Capacity building for innovative small and medium enterprises (SMEs) and business support organizations
- ✓ Pilot actions

Who we are:

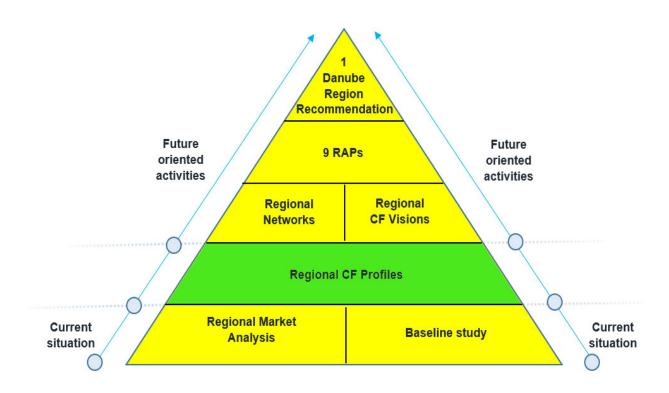
In this partnerships **16 organisations coming from 10 regions** aim at improving framework conditions for the development of alternative financing sources for SMEs in the Danube Region.





How we work:

The regional profiles will guide the project partners towards including relevant stakeholders in regional networks for developing the Regional Action Plan and the long-term targets on CF in their region (Regional CF visions). Those visions will enable the stakeholder groups to work jointly on the development and implementation of the RAPs and recommendations.



2 The regional profiles

- ✓ Describe the current situation of alternative finance in the partner regions
- ✓ Identify, inform and involve relevant stakeholders
- ✓ Support the development of common visions, Regional Action Plans (RAPs) and policy recommendations for the region



3 Crowdfunding basics

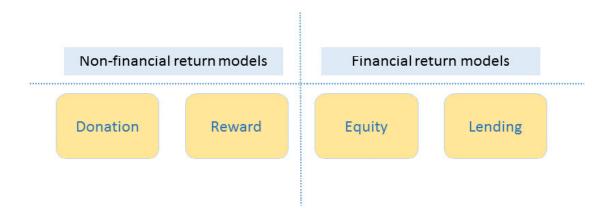
Types of Crowdfunding

Crowdfunding represents an effort from many individuals by offering a small contribution to support a project or a company in raising capital (*European Crowdfunding Network*).



Source: European Commission, Crowdfunding Explained to small and medium sized

In the case of **non-financial return crowdfunding models** individuals support a project because of emotional aspects of the campaign (donation-based) or they receive a symbolic award (reward model), which is not proportionate to the actual donation (*European Commission, Crowdfunding Innovative ventures in Europe*). The main advantages in the reward model can be attraction of first customers and a fast feedback on the commercial potential.



Financial return crowdfunding models provide an opportunity for the public to invest in start-ups or to offer loans with the expectation of a financial return while accepting some risks. The crowd could invest in early-stage companies (equity-based) or offer loans to SMEs under certain legal conditions (lending-based).





4 City of Zagreb and urban agglomeration - general information

Zagreb Urban Agglomeration Development Strategy is a new planning document of the regional development policy, introduced by New Regional Development Law (Official Gazette 147/14). City Office for Strategic Planning and Development of the City as an appointed regional coordinator of the City of Zagreb is in charge of the coordination of urban agglomeration scope defining procedure as well as for drafting of Zagreb Urban Agglomeration Development Strategy.

According to migration and employment criteria and considering natural resources, traffic systems and opportunities for developing joint programs & projects, this is the proposed scope of Zagreb metropolitan area.



Figure 1 Zagreb Urban agglomeration



Zagreb Urban agglomeration facts:

City of Zagreb + 29 municipalities

Area: 2.911,3 km (5% area of RH)

Population: 1,086.528 (25% RH population)

4.1 Regional characteristics and economic situation

The prioritization process (identification of thematic priority areas) has involved a wide range of research and business representatives and has been based on consensus. The risk of pursuing narrow sectoral interests was limited by a consistent application of the methodology and by substantiation of assessments and proposals on the data or other evidence. Such participatory approach has a number of advantages: it promotes the search for collaboration opportunities and synergies, enables the pooling of expert knowledge that is necessary for the interpretation of data, promotes coordination of strategic objectives of research and business organisations etc. This also lays down solid foundations for successful implementation.

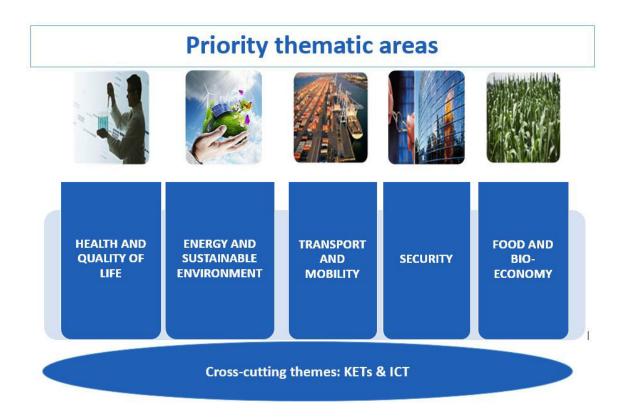
Through 4 main rounds of partnership consultations (entrepreneurial discovery), main thematic priority areas (TPAs) have been identified. In parallel to this process, global trends have been taken into account and strengths and potentials in the business and R&D sector of Croatia have been analyzed. Afore mentioned selection criteria have been applied for the selection of the thematic priority areas. Matching of business and scientific research sectors strengths has been conducted, and their capacities for RDI and the ability to respond to social challenges have been assesed.

For the purpose of further selection and narrowing of the thematic and sub-thematic priority areas (STPAs) within S3 strategy of the Republic of Croatia, a number of expert working groups composed of public and private R&D experts, as well as a working group composed of state officials, were established. The end result of these processes is the selection of 5 TPAs with relevant technological and production fields as the main focus for the S3 in Croatia: (1) **Health and quality of life**, (2) **Energy and sustainable environment**, (3) **Transport and mobility**, (4) **Security** and (5) **Food and bioeconomy**. Additionally, Croatia has identified two **cross-cutting** themes able to create the biggest added value and foster the emergence of new economic activities, rising of the productivity of the Croatian economy and the creation of new and sustainable job opportunities. Cross-cutting themes are KETs and ICT.



Under 5 TPAs there are 13 STPAs and additionally 2 cross-cutting themes. The list of STPAs of potential was distilled from a much broader canvas of potential options and the selection of these areas for prioritization does not imply parity in the allocation of investment as between each of these areas. The priority of Croatia in the first few years of S3 implementation is to create a climate favorable for innovation and to stimulate business sector investments in R&D activities in order to develop new products, services and technologies that will enable modernization and diversification of the Croatian economy. Successful implementation depends on a properly functioning monitoring system that could provide information leading to termination of "unsuccessful" priorities. Proposed priorities are specific and strongly linked with expected results, i. e. development/application of new product and technologies. The future context is envisaged as one in which all research funders must prioritize and must be able to show a return on investment. Majority of available funding will be allocated to the STPAs and certain research and innovation infrastructure that is required to support the STPAs.

Figure 2. The S3 TPAs and cross-cutting themes





4.2 General investment situation

In general, Croatia as the whole South East Europe region does not feature well developed venture capital and private equity market. According to the Venture Capital and Private Equity Country Attractiveness Index 2013, the country is positioned on the 65th position when it comes to the most attractive destination for PE/VC.

Croatian SMEs, especially those innovative and high risk, or in sectors with lower rates of return, are facing a challenging environment for financing. Bank lending is unavailable and expensive, and requires sufficient collateral, what is the main problem for SMEs. In addition, commercial banks are highly risk averse, especially for SMEs. On the other hand, underdeveloped capital markets, low levels of business investment opportunities and divestment (market powers) are resulting in virtual lack of VC industry, i.e. limited Venture Capital (VC) investment available at the moment.

A number of reasons have been identified why Croatian PE/VC funds are not suited to provide early stage funding:

- such funds tend to seek the safety and capital preservation that comes from investing in more established companies;
- such funds invest over shorter time frames and plan exit their investments after three to five years and the time period needed for investments in start-ups tends to last from seven to ten years;
- PE funds seek to make investments that are too large for start-ups.

The Government has launched measures in the previous years with attempt to decrease market distortion. Thus a number of private equity funds have entered the market in 2010, after the launch of the "Economic Cooperation Funds program", which committed 0.9 billion HRK (approximately 165.6 million USD or 125 million EUR) to match 1-to-1 financing through domestic institutional and private equity industry with Republic of Croatia budgetary resources.

In 2011, five domestic funds managed to attract the necessary co-finance and began operating. However, this has not been enough.

Further on, the Government in 2015 launched Innovation and Entrepreneurship Venture Capital Project aimed at fostering innovation, entrepreneurship, and private sector growth by strengthening the risk capital financing for innovative SMEs, including startups The cca 30 million EUR program will be implemented over ten years and will have three components: (i) a pilot venture capital fund; (ii) a seed co-investment fund; (iii)



technical assistance. The amount of 20 million EUR (government participation) will be funded from The World Bank loan.

In 2015 Croatian Government has established Venture Capital Fund, which will distribute funds for SMEs, and in particular for high technology SMEs. Venture capital for investments targets amounts higher than other financial instruments offered (e.g. between €1-3 million) and will be realised primarily in sectors with high growth potential. Venture capital programme will be entrusted to the EIF and/or other international finance institution who will successively select financial intermediaries based on co-investment facility. The entrustment however shall be made in sync with the actual progress of the implementation of the VC scheme financed from the World Bank resources.

Objective of this activity, which will be financed from ERDF, is to develop and modernize Croatian financial market and solve the problem of financing gap by introducing VC funds, with aim to ease access for innovative and risk preferable SMEs.

The proposed program follows up from the World Bank's STP and STP II programs by assisting the government to close the financing gap for young knowledge intensive SMEs. It will do this by three means. It will contribute to creating a venture capital segment interested in financing knowledge-based, innovative SMEs; it will contribute to generate deal flow from such firms; and it will increase the Croatian government's ability to spend European Structural and Investment funds.

Finally, and according to conducted ex-ante assessment, the financing gap for VC in Croatia still amounts in between 22 and 52 million EUR according to the calculation covering the current programming period.

4.3 Financing of innovation

Investments in knowledge-intensive clusters and innovation networks are important determinants of Croatia's competitiveness in the global markets. On the other hand, a commitment to the STPs development in Croatia will enable a systematic approach in integrating components of the entire RDI chain. Consequently, this should result in a fully functional innovation eco system with the absorption of the much-needed high skilled professionals and a creation of a sustainable bridge between the private and public sector.

Access to finance, particularly access to venture capital for start-up technology-based businesses in their initial stages, is limited. This is a very important obstacle correlated with the increase in competitiveness and the achievement of economic growth. Currently, Government is establishing VC fund under World Bank funding. This will help with early financing.



Due to an undeveloped capital market, the main sources of funding for companies in Croatia are banks, which are highly averse to risk and where long-term loans are, in principle, not available. Introducing new financial instruments can be useful particularly for innovative start-ups as it can be coupled with innovation management assistance, which increases the chances of reaching the technology commercialization stage. At local and regional levels institutions have been established to provide support, in different forms, to entrepreneurs and small businesses (i.e. regional and local development agencies, entrepreneurial centres and business incubators). At present, business support organizations provide general and low value added support services and advices. Furthermore, business support organizations have difficulty in meeting the demand from entrepreneurs and managers for specific and high value added services including quality management, marketing plans, investment and project appraisal and support, support in relation to intellectual property rights, support related to innovation and new product development.

Croatia has been a participant in FP7 since its inception in 2007. It is particularly successful under the scientific themes in which it is also strong at national level. These are: Healthcare, Transport and ICT. Croatia is doing reasonably well in the areas of Security, Biotechnology, Environment and Energy.

Participation of SMEs is also good: out of 225 SME applicants, 57 or more than 25% were selected for funding. Croatia has benefited strongly from Research Potential (FP7-REGPOT), part of FP7 specific programme 'Capacities', with a number of very substantial infrastructure projects. For example, textile technology is a field where considerable investment is being made to assist national industry through the development of expertise in the areas of innovative textile and textile related products. Detailed analysis of the FP7 programme leads to the conclusion that Croatia is particularly recognized at European level for research in the following areas: health care (translational medicine, bone regeneration, brain repair, some cancer treatment, anti-body technologies); transport; ICT (robotics, UAVs – unmanned aerial vehicles) and geodesics (anti-personnel mines, sub munitions and UXO).

In FP7, Croatia accounts for 394 participations and had a role of coordinator in 39 projects. The FP7 financial contribution per inhabitant (20.5 €/inhabitant) is higher than the EU13 average (17.8 €/inhabitant) but remains far below the EU15 average (95.2 €/inhabitant). FP7 was a great funding source for SME in Europe and Croatian companies participated in different instruments in this program. The number of SMEs was not high but the best success rate was in R&D performing companies active in Health, Environment, etc.



5 Regional Analysis on crowdfunding

From the Croatian perspective, crowdfunding is currently a big challenge. The greatest weaknesses are a small overall awareness of the possibility of crowdfunding, low use of Internet in online purchasing of goods, poor development and mistrust of e-business. But still, in Croatia there is a clear interest for crowdfunding. Every year there is a slow progress in the amount of campaigns backed, started or successfully produced and funded by Croatians.

Crowdinvesting is possible in form of investing in exchange for shares in private limited liability company, for stake in a cooperative or in an exchange for a "silent" (secret) partnership stake in the profit of the fund-seekers company. In the first case the equity share will correspond to proportion of investment in the company's registered share capital. In the second case, no matter the size of the investment, all members of cooperative will have equal voting rights and will have to participate in its operation, gain profit through it or otherwise participate in achieving its goals. All of these three possibilities reflect on the current Croatian laws.

5.1 CF actors (platforms, initiatives, intermediaries etc.)

Crowdfunding Academy is the first educational program on campaign production in Croatia co-developed and organised by UNDP Croatia and social enterprise Brodoto. Starting from 2015, Crowdfunding Academy has organised educational events and helped preparation and production of various crowdfunding projects. The Crowdfunding Academy team has mentored successful crowdfunding campaigns in Croatia and helped funding more than \$100,000 for different social causes. The initiative is also the organiser of the first Zagreb Crowdfunding Convention. In the end of 2015, the Academy has reached a wider scope by creating a global educational program on crowdfunding and alternative financing for UNPD offices around the world.

5.2 Available types of CF

There are few Croatian crowdfunding platforms:

 Croinvest: this platform combines five models of financing (donations, awards, loans, ownership participation and profit participation) customized to domestic law http://croinvest.eu/



- **2. Croenergy**, donation based crowdfunding platform exclusively for sustainable energy and environmental protection projects. www.croenergy.eu
- 3. ČINI PRAVU STVAR, donations for Humanitarian work, www.cinipravustvar.hr
- **4.** Registry of humanitarian aid of the Republic of Croatia http://croinvest.eu/rhp/

Currently there is only one equity based crowdfunding platform available in Croatia:

 Funderbeam SEE, blockchain equity based platform, https://www.funderbeam.com

Foreign Platforms

The most important foreign platform is **Indiegogo**. On the US based platform 47 projects were launched in 2015.

The second foreign crowdfunding platform operating in Croatia is **Kickstarter**. Eight projects started a reward based crowdfunding campaign on the platform in 2015.

5.3 CF volume of investment

There are no data available for donation based crowdfunding.

The first reward based crowdfunding campaign launched in 2011. The number of campaigns has increased in the following years, while the total collected yearly amount has doubled to ≤ 0.66 million in 2015

Equity based; €370.000 has been raised so far.

5.4 Existing Regulation Framework

There are no legal obstacles with regard to crowd donating and crowd sponsoring. However, crowdlending is strict regulated by the law on capital markets. That makes the whole procedure complicated and expensive. Public authorities cannot use this model for



any type of projects – this is the official standpoint of the Ministry of finance. The Croinvest.eu platform offers this possibility in a way that project lead may offer investor to loan funds in form of a interest-free or interest-bearing investment loan, which needs to be repaid in a defined amount of time. Multiple loans setup is also possible on different terms. This model resembles the standard loan agreement defined by Croatian laws. P2P lending is under strict regulation that makes the whole procedure complicated and expensive.

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6 SWOT analysis of regional CF potential

STRENGTHS

- Already successful campaign examples
- Creative human capital
- Growing interest

REGIONAL WEAKNESSES

- Lack of awareness
- Lack of local platforms
- Lack of possitive regulatory framework
- Tax regulation
- Hard to implement equity model

OPPORTUNITIES

- Set the possitive regulatory framework
- To establish a national platform
- To enable equity model

THREATS

- Inappropriate regulatory framework
- Focus on foreign platforms
- Loss of companies
- Loss of human capital



7 Regional development demand

According to the GDP dynamics, employment, unemployment and population figures in the NUTS II regions of the new member states (NMS10), four groups of NUTS II regions can be identified in terms of the convergence process towards the EU15::

- Regions with high convergence potential
- Regions with moderate convergence potential
- Regions with moderate divergence risk
- Regions with high divergence risk.

Figure 3 shows the average annual GDP growth rates in the various EU25 NUTS II regions. In the period 1995 - 2002, 31 out of the total of 41 regions on the NUTS II level of the new member states have recorded reductions in the difference in economical development, according to the GDP p.c. PPS with respect to the EU25 average. On average, the annual GDP p.c. PPS growth rate for the NMS10 amounted to 5.6 percent, while the EU15 countries recorded annual growth of 4 percent.

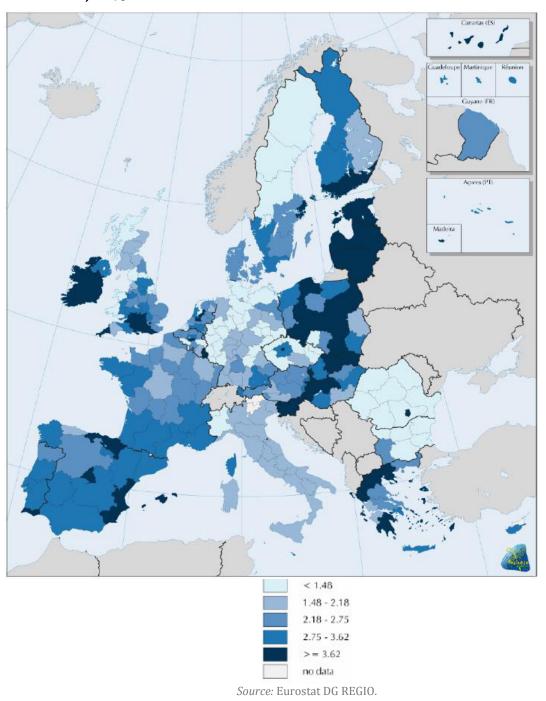
Six out of the ten NUTS II regions in the NMS10, which have grown at a slower rate in comparison to the EU25 average, are in the Check Republic, which is, along with Cyprus, the only country with a recorded slower rate of growth in comparison to the average of the older EU15 members. In the first group of NUTS II regions with high convergence potential, the three Baltic countries (Estonia, Lithuania and Latvia) and Slovenia are included, representing small economies which have been classified as one NUTS II region despite being nation states. Also, the three Hungarian regions are included here, located in the area between Vienna and Budapest, and the eastern region surrounding Debrecen, as well as the two Slovakian regions: Bratislava and Eastern Slovakia (Kosice). All of these regions are characterized by a high GDP growth levels, reductions in unemployment levels, gradual reductions or increases in the number of employees, and favorable demographic trends (increases or small reductions in the population figures).

NUTS II regions with moderate convergence potential are characterized by relatively dynamic growth (average GDP per capita growth rate, according to PPS above 4.5 percent), but in conditions of gradual increases in unemployment or decreases in employment. In these regions, it is expected that the positive components of the "creative



destruction" process will overwhelm the negative ones, thus the continuation should record positive trends towards further convergence.

Figure 3: Average Annual Real GDP Growth Rates of EU25 NUTS II Regions, 1995-2002, in %





In the NUTS II regions with moderate divergence risk, which are, in addition to Cyprus, found mainly along the borders of Check Republic and Germany, slower growth has been recorded (less or around the NMS10 average), however with increases in the unemployment rates. This group also includes the regions with slower GDP growth, but with reductions in the unemployment rates (Plzen, Karl. Vary).

The high divergence risk group includes 11 NUTS II regions, where the average annual increases of the GDP per capita PPS are more than one standard deviation lower than the NMS10 average. Apart from the slower growth, these regions are characterized by increases in the unemployment figures which, in addition to the reductions of the employment levels, lead to significant increases of the unemployment rate. Regions in this group also exhibit the worst demographic trends (reduction in population numbers).

7.1 Investment and business environment

With regards to the barriers and facilitators of business activity in Croatia, the World Bank's "Doing Business" surveys provide an annual cross-country assessment of business regulations. In 2014 doing business rank Croatia was 67th out of 189 countries, and in 2015 65th, which shows a slight improvement (World Bank, 2014; World Bank, 2015). Starting a business rank of Croatia is worse off in 2015 (88th) compared to 2014 (85th). Although the number of administrative procedures involved in starting a business decreased over time, the pace of change in Croatia is slower than elsewhere. The distance to frontier score aids in assessing the absolute level of regulatory performance and how it improves over time while it shows the distance of each economy to the "frontier," which represents the best performance observed on each of the indicators across all economies in the Doing Business sample since 2005. Compared to 2014, this indicator for Croatia increased by 0.71% in 2015, which represents a slight improvement.

Croatia is open to foreign investment; the Croatian government continues to prioritize attracting foreign investors. All investors, both foreign and domestic, are guaranteed equal treatment by law. There are no laws or practices that discriminate against U.S. investors, however, bureaucratic and political barriers remain. One of the greatest barriers is the country's inefficient and sometimes unpredictable legal system. The backlog of unresolved judicial cases peaked at 1.6 million in 2004 and has slowly been reduced to under 600,000 pending cases. Because of this large overhang, even the simplest matters can take years to resolve. Investors agree that an unpredictable regulatory framework, lack of transparency in administrative procedures, and lack of structural reforms weigh heavily upon the investment climate. Corporate income tax legislation and a Strategic Investment Act, which came into force during the last



government (2011-2015), were passed with the intention to help investors streamline large projects.

There are no specific laws aimed at foreign investment. Both foreign and domestic market participants in Croatia are protected under the same legislation. The Company Act defines the forms of legal organization for domestic and foreign investors. The following entity types are permitted for foreigners: general partnerships; limited partnerships; branch offices; limited liability companies; and joint stock companies. The Obligatory Relations Act regulates commercial contracts.

The government's e-government initiative "Hitro.hr" (www.hitro.hr) provides an on-line business registration component that reduces the time it takes to register a company to four days. Hitro.hr offices are located in more than 60 Croatian cities and towns. Business registration is the first step in a plan to make more government services available on line in the coming years.

The Agency for Investments and Competitiveness (www.aik-invest.hr/en) is available to all interested investors for assistance with foreign investment.

According to the Croatian Small Business development promotion act, "Micro businesses" are physical and legal entities that annually on average employ less than 10 employees and achieve total annual revenue equivalent up to \$2.3 million. Small business are defined as employing less than 50 employees and achieve total annual revenue, at the most, of \$11.4 million. Medium business are defined as employing between 50 and 249 employees and achieving revenues between \$11.4 million and to \$57 million.

7.2 Innovation

The Strategy for innovation encouragement of Croatia 2014-2020 was adopted in December 2014. Its main objective is to increase the level of competitiveness of the Croatian economy and increase social well-being. The document entails a list of around 40 guidelines structured around four thematic pillars: Development of the innovation system and setting up a legal and fiscal framework to encourage innovation; Strengthening the innovation potential of the economy; Encouraging cooperation and knowledge flows between business and academia; Strengthening of the human resources in innovation and creation of an attractive environment for world-class researchers.

Research institutions in Croatia possess good scientific potential and represent solid scientific base for development of competitive, innovation-driven economy. The vast majority of all scientists are employed in public sector which presents key research infrastructure available within the country. However, in order to achieve competitive,



innovation-driven economy it is necessary to overcome several major problems recognized. Primary obstacles restricting the capacity of the research community to undertake excellent research, conduct economy driven research and to transfer results to the wider economy are related to the outdated and inefficient research infrastructure, lack of resources for conducting research, and underperformance of knowledge and technology transfer activities.

Outdated and scattered R&D equipment and underdeveloped infrastructure in the public and private R&D sector do not permit research to be carried out according to international standards, thus hindering the quality of research outputs, results and impacts, making Croatia less competitive compared to the EU average. This represents an obstacle to enhance the quality and availability of their services/research necessary for successful integration in the European Research Area (ERA) and on the international level. Lagging performances of R&D&I organizations are also a result of insufficient investment in R&D, specifically a basic lack of research funding. Gross expenditure in R&D as percentage of GDP in 2012 was 0.75%, in comparison to EU-28 average of 2.07% that resulted with less competitive and less collaborative R&D sector in Croatia.

Therefore, Croatian research organizations are not able to conduct excellent and applied research that responds to the needs of the economy. Croatia is not performing well in relation to the scientific productivity indicator. Namely, according to platform Web of Science (WoS) except to relative growth of publications (2008-2011), in the last period 2012-2013 this number is decreasing (2,6%-4.4% annually). Moreover, overall patenting activity is low, compared to other member states, with PCT applications per billion GDP around 1/3 of EU average. Composite indicator "Intellectual property filings" has also decreased over last 3 years. This does not mean that new technologies are not being developed but rather that new technologies are not seeking protection through internationally recognised IPR system.

Regarding R&D activities of enterprises and in the context of EU 2020 Strategy, following identified problems should be solved: low quality and availability of RDI infrastructure in enterprises; weak environment for co-operation in R&D and promotion of R&D works results and innovations among enterprises and insufficient application of new technologies in the business sector.

Croatian medium and large enterprises invest more than 90% of private investments in R&D, while large enterprises invest highest portion, with more than 60% of R&D investments. Little less than 8% of private investments in R&D come from micro and small enterprises, thus showing their weak engagement in R&D activities which are considered to be too risky with the uncertain outcome. Due to the lack of public support for RDI activities and relatively low interest of enterprises, investments in RDI stagnated in the past years. In order to reverse the negative trends and stagnation, the use of ESI funds is envisaged; substantial support will be targeted towards private RDI investments covering



support both for in house R&D activities of enterprises (including SMEs) and for purchasing R&D services to launch new or fundamentally changed processes and products. R&D activities, next to other activities related to innovations implementation in enterprises are necessary for Croatian economy to become more competitive by increasing companies' productivity, accessing new, higher added-value markets and ultimately, leading to sustainable employment creation in the context of fierce global competition.

7.3 Regulation framework

The legal basis for public and private investments, state aid and tax deductions regarding RDI are stated in various Croatian Acts, Regulations and Guidelines, such as:

- Act on Scientific Activity and Higher Education; Regulation on issuing permits for conducting scientific activity, conditions for reaccreditation of scientific organizations and permit's content; Regulation on permit's content and conditions on issuing permits for conducting activities in higher education, delivery of study programs and reaccreditation of higher education institutions.
- Act on investment promotion and development of investment climate, Small Business Act, Act on Promotion of Entrepreneurial Infrastructure and Business Environment
- Act on State Aid, The Personal Income Tax Act, Guidelines for State aid policy for the period 2014.-2016., Act on the Structure and Scope of State Administration Organisations, etc.

These and related acts and regulations describe and define the authority of state administration bodies and public and private research institutions, including their financial and institutional rights.

Moreover, Croatia has joined the Western Balkans Regional R&D Strategy for Innovation. As part of this initiative the countries will implement programs in order to improve the research base and conditions for research excellence, promote science-industry collaboration and technology transfer, enable business innovation and innovative startups, and strengthen the governance of national research and innovation policies. The comprehensive, sector-wide approach complements the treatment of other regional initiatives, such as the Danube and Adriatic Ionic Strategies.

The system of Croatian institutions in charge of governing RDI shares many similarities with other European countries. A higher level of governance in charge of steering and programming innovation policy includes the parliament and three central government



ministries: Ministry of Science, Education and Sports (MSES), the Ministry of Economy (MoE) and the Ministry of Entrepreneurship and Crafts (MoEC). Additionally, delivery of some activities has been delegated to a set of different stakeholders. Implementation, monitoring and funding involve various intermediaries in the form of councils, agencies and other public and state bodies, although some funding functions remain in the ministries. The chart depicting the most important players of the Croatian Innovation System is shown in Figure 5.

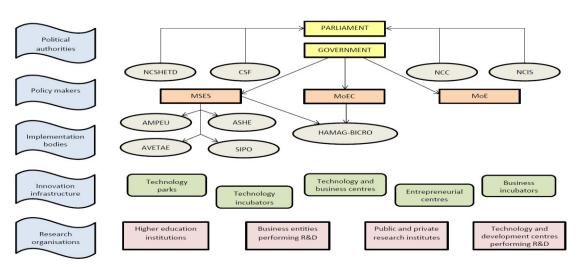


Figure 5 The most important players of the Croatian Innovation System

- Ministries: Ministry of Science, Education and Sport (MSES), Ministry of Economy (MoE), Ministry of Entrepreneurship and Crafts (MoEC)
 Councils and foundations: National Croatian Science Foundation (CSF), National Council for Science, Higher Education and Technological Development (NCSHETD),
 National Competitiveness Council (NCC) and National Council for the Information Society (NCIS)
 Agencies and state administration bodies: Agency for Science and Higher Education (ASHE), Croatian Agency for SMEs, Innovation and Investments (HAMAGBICRO), State Intellectual Property Office (SIPO), Agency for Mobility and EU programmes (AMPEU), Agency for Vocational Education and Training and Adult
 Education (AVETAE)

Source: MSES based on OECD Report (2014)

The central institution of the Croatian research system is the Ministry of Science, Education and Sports (MSES), which is responsible for the entire research and higher education system. The Croatian Science Foundation (CSF) is the main funding body for competition-based fundamental scientific research since 1 July 2013 when the allocation of competitive research grants was transferred from MSES to the Foundation. It is important to stress out that CSF (and previously MSES) mainly finances fundamental research projects. In addition, CSF develops programmes that support collaboration between research organisations and industry by funding the scientific research with the



possible technological application, as well as programmes supporting the future excellent researchers by funding the development of their research careers (since 2014). Furthermore, the Unity through Knowledge Fund (UKF) has been affiliated with the CSF in 2014 in order to maximize its efficiency. UKF is a funding instrument that Croatia introduced since 2006 through the World Bank funded Science and Technology Project. Grants delivered through the UKF programs included a scientific Diaspora as well, and were highly internationally competitive providing excellent results in funding R&D for Innovation. More than 70% of researchers from both public and private sectors in Croatia who received the UKF funding also received EU funding through FP7 instruments. Since 2013 MSES allocated around 30 million EUR for development of CSF programmes. However, raising the quality of scientific research in Croatia will require additional effort, with more proactive approaches and instruments at CSF and reform of HEIs and PRIs coupled with systematic monitoring and evaluation of policy support measures.

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8 Good practice examples

Forum.tm

- Company: Forum.tm NGO Dom kulture Zagreb
- CF platform used: indiegogo.com
- Topic: independent, non-profit portal
- Amount of money raised: \$9,045 USD



Short description

Forum.tm is an independent, non-profit portal. Behind the project, there are only journalists. Journalists want to continue to develop it as the responsible and independent public media. In return they promise even more good journalism and they will continue to be the source of reliable information.

Forum.tm has independent editorial policy because it isn't linked to any law firm or church foundation. Forum.tm, as an online media, started in 2013, when some of the journalists of the closed weekly Forum.tm took matters into their own hands.

After more than three years, it's evident that Forum.tm does not advocate the interests of the politically and economically powerful and that its journalists write about things that others are silent about. Forum.tm is not afraid and it still resists.

Forum.tm draws attention on systemic injustice in a society where capital is omnipotent, and the rights of citizens are marginalized. It advocates restoring of the dignity of work and workers, equality, denounces social deviations such as denial of anti-fascism, glorification of war criminals, pressure of church structures on political decision making and the imposition of religious doctrine upon all spheres of society which is supposed to be secular.

We are who we are, we write as we think, respecting journalistic ethics and the public's right to know. We don't turn to corporations or politicians for their "sponsorship". Our only "target audience" is - you.

Forum.tm is the first Croatian media outlet that decided to step into the uncertain and ask for support of its readers, after it was left without the support of the Ministry of Culture.

The goal that we set for this campaign is not enough for long-term journalistic work, but it will help us bridge the critical period of the next two months. If you outbid, no one happier than us. Be our source - "unnamed", "top source" or even "deep throat" - and we will continue to be your media of reliable information.

Forum.tm is made of professionals with over 20 years of experience in journalism, and two of our authors received awards for the articles published on Forum.tm.

We want to continue to develop Forum.tm as a responsible public media. We promise more good journalism.

CF link: https://www.indiegogo.com/projects/neka-vide-da-nas-ima-media#/



Baggizmo

- Company: Baggizmo Motus Vis Inc. founder: Ladislav Juric
- Platform used: kickstarter.com
- Topic: tech wearing
- Amount of money raised: \$44,120 USD



Short description

It's a unique bag for all the gizmos and things you need to have at your fingertips at all times. Easy to wear (and to look at), made ergonomically with high-quality innovative materials which will make you look good, feel good and carry on with your day.

It's not just a bag for your gizmos, but it offers a unique way in how the bag is worn from the beginning. It uses brilliant design to provide a simple and stylish solution for the man who cannot go anywhere without his gadgets. Baggizmo puts all your technology at your fingertips – by placing it under your arm.

You can wear Baggizmo while driving, riding a bike, attending a meeting or dining out. You can wear it above or below a suit jacket. This means you won't spoil the lines of your tailored clothing by stuffing the pockets with bulky gadgets. Because Baggizmo is the first bag of its kind, tailored for men and their gizmos, both functional and fashionable.

Easy to wear, highly functional with numerous compartments specially designed to look slim even when it's full, made ergonomically with high-quality innovative materials which will make you look good, feel good and carry on with your day.

Thinking in this way, Baggizmo has found a new solution for wearing "the bag for all the gizmos" under the arm no matter what you wear - over a shirt, under or over a jacket or a business suit. This way you won't ever have to (or want to) take it off!

Baggizmo's shape has been conditioned around a polygonal pattern that has enabled the good grip of the bag to the torso, while the possibility of regulating the length of the straps provides customization depending on a man's proportions.

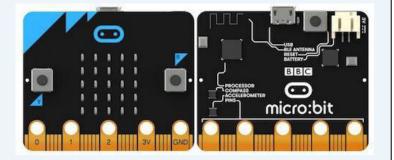
Comfort and carrying convenience have also been determined by the choice of the material that clings to the body, but still allows the circulation of air between the bag and the body.

CF link: https://www.kickstarter.com/projects/ladislavjuric/baggizmo-the-only-everyday-carry-bag-you-will-ever



BBC micro: bit - STEM revolution in schools

- Company: IRIM Institute for Youth Development and Innovativity
- CF platform used: indiegogo.com
- Topic: STEM Revolution in schools Amount of money raised: \$ 290,324USD



Short description

With this campaign we would like to use the enormous leverage we have with 360 schools and other institutions involved, 1800 donated robots and 8000 children participating in the Croatian Makers league and introduce on a massive scale the latest educational technologies: every child should be given an opportunity, for his/her own sake and because we are too small to waste our human resources.

As the first phase of our project we would like to donate at least 3600 micro:bits to at least 360 schools and institutions involved in the Croatian Makers league.

We believe that with a successful implementation of this phase we can induce the next one, which is that each and every child in 6th or 7th grade of elementary schools in the whole Croatia gets a micro:bit, together with the complementary education. With this we can radically close the technological and mental gap between what the Croatian education offers and the contemporary young people need. This means we are talking about 40,000 micro:bits. Such a mass of cutting edge technology can change not only education, but also the whole society

All proceeds from this campaign will be used exclusively to buy and ship the equipment and all general expenses of our NGO we will provide for by ourselves.

Everybody who takes part in our campaign becomes part of change – a key change not only in lives of many young people, but also change in the mindset of the whole society: instead of being oriented towards the past and negativity – let's orient ourselves towards the future, positivity, accomplishments and vision. By participating now in changing the education of children who will leave schools tomorrow, you are making this country better today!

Off course, we also offer privileges i.e. perks. But not in order to 'bribe you', but to enable you to experience first-hand the change: we are providing micro:bits for one or more children, exclusive courses with our Master educators, as well as symbols that you can proudly display: badges and T-shirts

CF link: https://www.indiegogo.com/projects/bbc-micro-bit-stem-revolucija-u-skolama-education#/



9 List of references

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- 2. Strategy for innovation encouragement of the Republic of Croatia 2014.-2020.
- 3. City of Zagreb Development Strategy
- 4. Regional Development and social indicators in Croatia Backgorund Paper
- 5. Operational programme competitiveness and cohesion 2014 2020.
- 6. http://www.crowdfunding.hr/