

# Multifaceted impact: Digital explorers' value for money assessment

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#### Introduction

The Digital Explorers project was implemented by a consortium of partners¹ with the financial assistance of the European Union, contracted by ICMPD through the Mobility Partnership Facility (MPF) from January 2019 till December 2021. As a legal migration pilot project, Digital Explorers sought to test and evaluate prospects of intensified partnership between the EU and Nigeria in the field of information and communication technologies (ICT). Project consisted of two tracks: a 1-year employment and a half-a-year internship in Lithuanian ICT companies. Second track was specifically designed for female entry level data analysts / scientists from Nigeria.

With a view of better understanding and quantitatively assessing the impact of Digital Explorers, **cost-effectiveness and impact assessment** was carried out following the principles of cost-benefit analysis. Data gathered by the project consortium, information provided by participating companies and ICT specialists, official statistics and other sources were employed. The analysis zooms on the

<sup>&</sup>lt;sup>1</sup> Digital Explorers' consortium includes public agency Enterprise Lithuania, policy and research non-profit AfriKo, ICT trainers CodeAcademy, and mobility experts Diversity Development Group.

timeframe of the project implementation and three years after its completion, providing an impact forecast until the end of 2024.

The following sections briefly present the main findings of the "value for money" assessment by respectively looking at the project's **direct impact on tax inflows into** the state budget, value-added for the Lithuanian ICT sector and cost-effectiveness, and positive impact on participants' salaries:

- Investments for talent attraction in the high value-added ICT sector boost both public and private sectors and make-sense from an economic point of view. For the state, the Digital Explorers project will have generated 1.16 million EUR in additional tax revenue until the end of 2024. For the ICT sector, it will have created around 1.7 million EUR in value-added, meaning that every euro spent on the project will have generated 2.3 EUR in return. Moreover, benefits of the project will overtake costs immediately after its conclusion in 2022.
- Participation of Lithuanian companies in talent attraction initiatives can create unexpected economic synergies, for example, by fostering foreign direct investment in home countries of international talents. Opening of a branch office in Nigeria not only serves as an additional source of profits for the partner company of the project, but also offers a pool of talent to fill Lithuanian ICT sector needs remotely.
- The Digital Explorers project has placed its participants on a successful career trajectory. Nigerian ICT specialists have seen a very fast increase in their salaries, which have grown by 78 percent on average since September 2019. Not only does this indicate how well project participants have integrated within the Lithuanian ICT sector, but also predicts further increase in salaries for the participants of the second track.

### Additional tax revenue

15 participants took part in the First track of Digital Explorers. 11 out of 15 remained in Lithuania after its conclusion. Second track had 11 participants and seven of them remained in Lithuania after the end of this round. Considering that currently Lithuania is not a long-term residence preference for most of the Nigerian participants,<sup>2</sup> future

<sup>&</sup>lt;sup>2</sup> It is likely that for participants of the project Lithuania is a temporary migration stop before returning to Nigeria, or gaining employment in potentially more attractive EU countries (Scandinavia, Germany or others), US, Canada.

impact forecasts were based on a relatively conservative assumption that the number of participants remaining in Lithuania will steadily decline in the coming years. Accordingly, at the end of 2024, five participants of the first track and one participant of the second track are expected to still reside in Lithuania.

Table 1. Taxes paid to Sodra and state budgets (Track I), EUR<sup>3</sup>

	2019.09 – 2021.12	2022	2023	2024
Number of participants at the end of the period	11	9	7	5
Average annual number of participants		10	8	6
Average monthly salary (gross)	-	4126	4332	4549
Estimated salary (total)	741,110	495,120	415,872	327,528
Taxes paid	270,545	204,336	171,630	135,171

During the project implementation phase, partner companies paid more than 270.5 thousand EUR to the State Social Insurance Fund (Sodra) and other employment-related state budgets on behalf of participants of the Digital Explorers project (see Table 1).<sup>4</sup> In 2022-2024, taxes paid on behalf of project participants are estimated to reach between 135.2 thousand and 204.3 thousand EUR per year.

In contrast to the First track, the second phase of Digital Explorers project lasted for only 6 months, and participants received monthly 600 EUR scholarships and monthly 250 EUR reimbursements for living expenses, which were not taxed as employment-related income. Nonetheless, after the end of the Second track, seven participants were retained by Lithuanian ICT and Fintech companies. Thus, additional tax revenues have been collected since December 2021. In the light of the fast-paced upward trend in salaries of participants of the first track, it is estimated that in 2022-

<sup>&</sup>lt;sup>3</sup> Conservative yearly salary growth rate of 5 percent is employed.

<sup>&</sup>lt;sup>4</sup> In contrast to other MPF pilots, Digital Explorers with the First track explicitly facilitated employment rather than educational opportunities or other schemes which do not depend on contractual commitments and salary payments by participating companies. While the project provided comprehensive facilitation, Nigerian professionals were directly employed by Lithuanian firms without subsidies from the grant.

2024 between 37.9 thousand to 72.1 thousand EUR will be paid in taxes by employers of participants of the Second track (see Table 2).

Table 2. Taxes paid to Sodra and state budgets (Track II), EUR<sup>5</sup>

	2021.05 – 2021.11	2022	2023	2024
Number of participants at the end of the period	7	5	3	1
Average annual number of participants		6	4	2
Average monthly salary (gross)	-	2612	3918	4114
Estimated salary (total)	-	188,064	188,064	98,736
Taxes paid	-	72,144	72,144	37,877

Tax revenues collected in connection with the salaries of the project consortium (195 thousand EUR covered by the EU grant) served as an additional source for tax inflows into Sodra and state budgets generated by the Digital Explorers project. **Taken** together with taxes paid on behalf of project participants, it stands for 1.16 million EUR in additional tax revenues created by the project.

### New value-added for the ICT sector

According to the Statistics Lithuania, in 2018–2020, one employee in the Lithuanian ICT sector created from 29.4 thousand to 34.1 thousand EUR of value-added, whereas the growth pace of this indicator reached 8.73 percent on average. Thus, until 2024 value-added per employee in the Lithuanian ICT sector will reach around 47.7 thousand EUR. In the light of these forecasts, **until the end of 2024, participants of the Digital Explorers project will have created around 2.5 million EUR in new value-added** (see Table 3).6

<sup>&</sup>lt;sup>5</sup> Conservative yearly salary growth rate of 5 percent is employed.

<sup>&</sup>lt;sup>6</sup> In the light of a relatively high number of open positions in the Lithuanian ICT sector, the assessment assumes that no economic harm is caused by employing a foreign rather than a Lithuanian national. Thus, no respective reduction

Table 3. Value-added created by participants of the Digital Explorers project, EUR

	2019	2020	2021	2022	2023	2024
Number of participants at the end of the period (Track I)	13	11	11	9	7	5
Number of participants at the end of the period (Track II)			7	5	3	1
Number of participants at the end of the period (total)	13	11	18	14	10	6
Average annual number of participants	13	12	14.5	16	12	8
Value-added per employee, EUR		34,143	37,123	40,363	43,885	47,716
Value-added, EUR (total)	-	409,715	538,280	645,803	526,625	381,725

While total costs of the project stand at around 1.348 million EUR, the economic net present value (ENPV) of the project for 2019–2024 equates to 835 thousand EUR. The benefit/ cost (BCR) ratio of the Digital Explorers project is 1.7. In other words, the economic utility of the project is nearly twice as high as its costs. Moreover, benefits of the project will overtake costs immediately after its conclusion in 2022. (see Table 4).

Table 4. ENPV and BRC calculations, EUR

	2019	2020	2021	2022	2023	2024
Project costs	-619,272	-267,732	-460,775			
Project economic utility		409,715	538,280	645,803	526,625	381,725
Project Net Flow	-619,272	141,983	77,505	645,803	526,625	381,725
Accumulated Net Flow	-619,272	-477,289	-399,784	246,019	772,644	1,154,369

in value-added is conducted. In 2018-2020, the ratio of open to occupied positions in the Lithuanian labor market stood at 1.4 percent, whereas for the ICT sector this indicator was considerably higher - 2.3 percent (Statistics Lithuania, 2022).

Economic Net Present Value (ENPV)*	834,729			
Benefit/ cost ratio (BCR)	1.7			

<sup>\*</sup> Discount rate - 5%

Direct investments in Nigeria made by one of the companies participating in the Digital Explorers initiative serves as an additional source in value-added calculations. In 2022, 5 ICT developers were employed in Abuja, the capital of Nigeria, whereas the Lithuanian ICT company expects to hire 15-25 additional developers until the end of the year and looks to expand to 80-100 employees in Nigeria in the coming years. As salary costs are incurred outside of Lithuania, the expected value-added was calculated by eliminating the average salary component in Lithuanian ICT sector (76.6 percent) and accounting for profits only (23.4 percent).

Table 5. Value-added of project partner FDI in Nigeria, EUR

	2020	2021	2022	2023	2024
Number of employees at the end of the period		5	25	50	80
Average annual number of employees		-	15	38	65
Adjusted value-added per employee, EUR	-	8,687	9,445	10,270	11,166
- Base value-added per employee, EUR	34,143	37,123	40,363	43,885	47,716
- Value-added adjustment	23.4%	23.4%	23.4%	23.4%	23.4%
Value-added, EUR (total)	-	-	141,675	385,125	725,790

In sum with the impact of the project partner's direct investment in Nigeria, the economic net present value of the project for 2019–2014 reaches 1.7 million EUR, whereas the benefit/cost ratio stands at 2.3.

## Soaring salaries of participants

The upward change in average salaries of participants of the Digital Explorers project suggests that **Nigerian specialists have successfully integrated within the** 

**Lithuanian ICT sector**. Comparisons with average salaries administered by partner companies and average national salaries second such a conclusion.

At the outset of the first track, average salary received by project participants was lower than average salary paid by partner companies: salaries of 11 participants reached between 55 to 90 percent of the average salary, whereas two participants earned more than the average. After the end of the first track, average salary of project participants who stayed in Lithuania increased by 40 percent, and by the end of 2021 reached 3696 EUR per month. Only two participants received salaries lower than 90 percent of partner company average, while nine were approximately paid the average of more. It is also worth pointing out that salaries of two participants were twice as high compared to average salaries paid by their respective companies.

Table 6. Salaries compared: project participants, national and ICT sector averages, EUR/

	Digital Explorers	National average	ICT sector
September 2019 (Start Track I)	2077	1346.7	2418.8
September 2020 (End Track I)	2914	1443.8	2519.2
December 2021 (Track I)	3696	1586	2802.1
December 2021 (Track II)	2612	1586	2802.1
		Digital Explorers/ National average ratio	Digital Explorers/ ICT sector ratio

September 2019 (Start Track I)	-	154%	86%
September 2020 (End Track I)	-	202%	116%
December 2021 (Track I)	-	233%	132%
December 2021 (Track II)	-	165%	93%

Throughout the project implementation phase, participants of both the first and the second track earned considerably more than an average worker in the Lithuanian labor market (see Table 6). After 12 months in Lithuania, participants of the first track witnessed a sharp increase of their salaries and also started earning more than the ICT industry average. In the light of these tendencies and work experience and competencies acquired during the project, in 2022–2023 salaries of participants of the second track are also likely to increase at a steady pace and overtake the ICT sector average.

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