ITC ILO

International **Training** Centre

DATA-DRIVEN SERVICES TO INCREASE THE TRAINING OUTREACH OF THE CENTRE VIA THE PROMOTION OF FREE SELF-GUIDED DISTANCE LEARNING COURSES

FINDINGS OF AN EXPERIMENT

EXECUTIVE SUMMARY

This paper describes an experiment with Data Driven Services (DDS) to increase the training outreach of the Centre and, more in particular, to "harness the data streams generated during past and ongoing service transaction processes to identify, by way of causal inference, individuals and institutions with a high demand and need for the Centre's services (…)."[1] The overall objective of the experiment was to contribute to the achievement of the outcomes of the 2022–23 ITCILO Programme and Budget. The immediate objective of the experiment was to strengthen the capacity of the Technical Programmes of the Training Department to reach a larger number of people in the world of work with the right services at the right time, here by experimenting with segment-specific promotional activities informed by marketing data analytics. The intermediate beneficiaries of the experiment were the Technical Programmes in the Training Department of the Centre. In turn, the ultimate or intended beneficiaries of the experiment were all people in the world of work represented through the ILO constituency and other ILO development partners. The scope of the experiment was limited to the promotion of free self-guided distance learning courses of the Centre. The scope of the experiment was further limited to digital marketing channels to promote outreach of the free self-guided distance learning courses of the Centre.

The experiment sought answers to three questions: (1) Can digital marketing increase uptake of free self-guided distance learning courses? (2) Can targeted digital marketing aimed at potential learners with characteristics similar to prevalent profiles of past learners further increase uptake? (3) Is there a causal link between growing numbers of learners in free self-guided distance learning courses and growing numbers in fee-based courses? Three free self-guided distance learning courses were chosen for the experiment: Business and Decent Work; Introduction to International Labour Standards; and Introduction to Project Cycle Management. The preparatory stages of the experiment, including concept design, data preparation and data analysis, took place in April, May and June. The actual promotional campaigns were run from July to September in several waves via social media and emails. The evaluation of the experiment took place in October.

The findings of the experiment imply that digital marketing can improve uptake of free self-guided distance learning courses. Course page views and subsequent enrolments significantly increased during the experiment on the back of a social media campaign and email marketing activities. Also, campaigns targeted at potential distance learners with profiles similar to prevalent groups of distance learners from past learning activities on the same topic can significantly further drive response rates in the case of email marketing. In turn, where Facebook Ads campaigns are concerned, absolute numbers of people reached are higher when campaigns are not tailored to personae due to the sheer scale of the global network of Facebook users. This also means that Facebook Ads campaigns are most effective when targeting interests, and thus can be used to reach a new target audience worldwide, while profile-targeted emails are more effective at converting potential leads. For best results, the two channels could be combined.

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[1] ITCILO Programme & Budget 2022–23, p.37

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As regards the question of whether personae of prevalent groups of former participants can serve as a blueprint for targeting messages at potential leads, it is important to note that the profiles diverge primarily by subject area. Therefore, interest in a given topic due to professional background seems a strong denominator of inclination to enrol in a distance learning activity. Not surprisingly, language of instruction can tilt enrolments in given regions even though English seems the preferred medium of instruction across the beneficiary universe. Interestingly, women were as likely as men to enrol in fee-based courses, somewhat refuting popular assumptions about their heightened vulnerability when accessing the digital learning highway.

The experiment points towards a causal link between growing numbers of learners in free self-guided distance learning courses and growing numbers in fee-based courses. Generally speaking, the absolute number of enrolments in fee-based courses increases on the back of growing numbers in free self-guided distance learning courses, as a certain proportion are likely to continue their learning journeys provided they had a quality learning experience. Notably, causality can play out both ways, with trainees converting from free to fee-based and vice-versa. The conversion rates tend to increase when a link to a related learning activity is added at the end of a given learning activity, ideally combined with an incentive to continue along a multi-step learning journey (like the prospect of attaining a diploma).

As a follow-up to the experiment, it is recommended that Technical Programmes:
- Systematically promote distance learning offerings to stimulate service uptake in unit-level areas of expertise.
- Promote free self-guided distance learning activities as entry-level services that lead towards follow-up enrolments.
- Incentivize follow-up enrolments by bundling services together as learning journeys.
- Use social media ads to boost Customer Relationship Management (CRM) and increase the universe of contacts including from vulnerable groups.
- Use Facebook campaigns to widely increase visibility, engagement and product awareness across the beneficiary universe and expand the number of active contacts in the central CRM database.
- Focus on targeted email campaigns to follow-up on these leads.

It is furthermore recommended that the Office of the Director of Training (TDIR):
- At regular intervals, promote all free self-guided distance learning courses to the beneficiary universe as part of Facebook campaigns.
- In addition, draw on the central CRM database to launch feature campaigns promoting course packages linked to themes prioritized by the ILO.
- Carry out follow-up experiments to further investigate channels for increasing training outreach among core constituents and target groups with known vulnerabilities.
- Support Technical Programmes to develop additional free flagship self-guided distance learning courses and to increase awareness of the profile of participants and appropriate outreach actions.

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1. INTRODUCTION

The environment in which the Centre operates is undergoing fundamental change, driven by long-term trends accelerated by the COVID-19 pandemic. Learners are increasingly technology-savvy, wanting to access learning services 24/7 and co-creating their own learning experience; advances in digital technology open up new opportunities for learning service providers to upscale outreach and to reduce unit costs.

In response to these changes, the Centre has for several years been shifting asset weights in its service portfolio; the COVID pandemic has accelerated this transformation process. Before 2018, the Centre's main emphasis was on individual-level capacity development, with a focus on face-to-face training. The Centre's 2018–21 strategy framework set the stage for the diversification of the service portfolio to better harness digital learning and collaborative technology and applications, in response to the ILO's renewed focus on institutional capacity development. During the 2018–19 biennium, the Centre expanded its distance learning outreach and developed a suite of advisory services to complement its training activities. The Centre also invested heavily in learning innovation, piloting augmented and virtual reality applications and introducing new training products on future foresight techniques, big-data mining and artificial intelligence. In the wake of the COVID-19 pandemic, the pace of transformation of the Centre's service portfolio has accelerated, characterized by a shift in emphasis from face-to-face training to online learning and a stronger focus on institutional-level and system-level capacity development services.

Data-driven services (DDS) play a crucial role in the new operational model of the Centre. DDS refer to the use of data for evidence-based management. DDS focus on data as a critical resource for value creation and develop their full relevance in cases where large amounts of data need to be collected, processed and visualized or disseminated to inform decision-making.

The DDS of the Centre are grouped under three themes:
• DDS to increase outreach are used to better target the intended beneficiaries of the Centre.
• DDS to improve impact enable the Centre to fine-tune service content and delivery.
• DDS to manage knowledge inform decisions along the steps of the service delivery cycle by creating systems for data collection, processing, analysis, visualization and dissemination.

This paper focuses on DDS to increase the training outreach of the Centre and, more in particular, on DDS that "harness the data streams generated during past and ongoing service transaction processes to identify, by way of causal inference, individuals and institutions with a high demand and need for the Centre's services (…)." [2]

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[2] ITCILO Programme & Budget 2022–-23, p.37

In the past, the digitally enhanced outreach activities of the Centre were more likely to rely on decentralized initiatives at the Technical Programmes level, with compartmentalized access to data about learners and individual network connections. Going forward, the Centre is in the process of building a centralized in-house data analytics function in the Office of the Director of Training (TDIR), with the aim of shifting the focus from this more reactive approach towards an approach with stronger emphasis on prediction and co-creation. The work of the newly established data analytics team in TDIR so far has focused on the following steps: to establish a central participant database by pooling and cleaning existing data in MAP and the eCampus; to develop profiles (or personae) of prevalent user groups in the beneficiary universe of the Centre; and to test and develop segment-specific outreach campaigns that harness digital technology to further boost training outreach.

The experiments described in the following were designed and implemented in the context of this biennial workplan.

2. OBJECTIVES OF THE EXPERIMENT

The overall objective of the experiment was to contribute to the achievement of the outcomes of the 2022–23 ITCILO Programme and Budget (P&B). The immediate objective of the experiment was to strengthen the capacity of the Technical Programmes of the Training Department to reach a larger number of people in the world of work with the right services through the right channel, here by experimenting with segment-specific promotional activities informed by marketing data analytics.

The expected overall outcome of the experiment was an expanded participant universe. The expected immediate outcome of the experiment was a strengthened knowledge base for Technical Programmes of the Centre about (a) how to raise awareness about their distance learning services among potential beneficiaries and (b) how to convert leads into participants.

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3. TARGET GROUPS

A distinction was drawn between the intermediate and ultimate beneficiaries of the experiment. The intermediate beneficiaries of the experiment were the Technical Programmes in the Training Department of the Centre. In turn, the ultimate or intended beneficiaries of the experiment were all people in the world of work represented through the ILO constituency and other ILO development partners.

4. SCOPE

The scope of the experiment was limited to the promotion of free self-guided distance learning courses of the Centre. In the 2020–21 biennium, these free self-guided distance learning courses constituted about 60 per cent of all participants reached with distance learning [3]; they cover core ILO policy messages and are available 24/7 free of charge in official ILO languages – they thus constitute the most widely democratically accessible learning modality of the Centre. The focus on these free self-guided distance learning modules reflects the primary emphasis of the pilot on boosting outreach (not income) through data analytics.[4]

Breakdown of activities by training and non-training capacity development services (2014–2021)
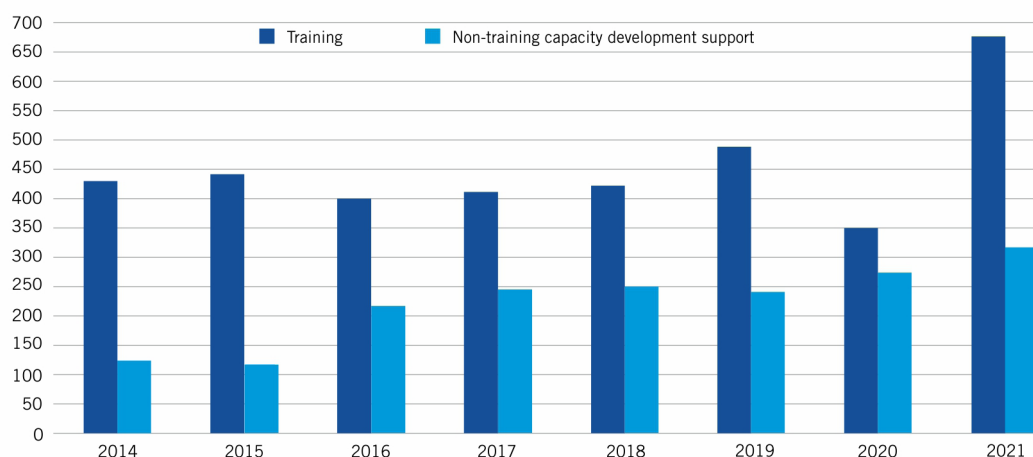
Source: MAP. Media development activities started to be recorded in MAP in early 2013, with the introduction of the new MAP.

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[3] IBI database

[4] The free self-guided distance learning courses of the Centre effectively constitute the first touchpoint between many people in the world of work and the Centre. Participants in free self-guided distance learning courses might decide to enrol in other learning activities of the Centre, whether free or fee-based. A secondary emphasis of the pilot was to analyse the ensuing learning journey of return participants, including freemium users converting from free to fee-based activities. See the chapter on the research framework for further information.

Universe of online learners by type of distance learning (2020–21 biennium)
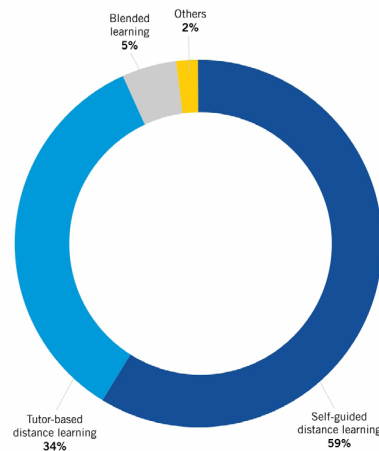
Source: MAP and e-campus

The scope of the experiment was further limited to digital marketing channels to promote outreach of the free self-guided distance learning courses of the Centre. More specifically, it was decided to focus on (a) social media campaigns (here: paid Facebook campaigns) and (b) email campaigns using a CRM application called Active Campaign. The selection was motivated by the fact that these tools were readily accessible to the Centre at low cost and that the Centre could readily draw on participant data collected routinely as part of the registration and enrolment process to "feed" the campaigns.

Refer to the next chapter for more information on the sample of free self-guided distance learning courses, the mix of digital promotional tools and the data sources used by the Centre.

5. RESEARCH FRAMEWORK

5.1 RESEARCH QUESTIONS

The experiment sought answers to three research questions (RQ):

1 RQ 1: Can digital marketing increase uptake of free self-guided distance learning courses?

2 RQ 2: Can targeted digital marketing aimed at potential learners with characteristics similar to prevalent profiles of past learners further increase uptake?

3 RQ 3: Is there a causal link between growing numbers of learners in free self-guided distance learning courses and growing numbers in fee-based courses?

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5.2   KEY PERFORMANCE INDICATORS

The Key Performance Indicators (KPI) to measure results of the experiment were:

Research question (RQ)	KPI[5]	Target	Source of verification
Can digital marketing increase visibility and uptake of free self-guided distance learning courses?	No. of course page views No. of new enrolments in free self-guided distance learning courses promoted	Increase of 600% in 1 month Increase of 500% in 1 month	Google Analytics eCampus
Can *targeted* digital marketing aimed at potential learners with characteristics similar to prevalent profiles of past learners further increase engagement and uptake?	Open rate Click-to-open rate Enrolments Impressions, reach, likes Average cost per results	Open rate and click-to-open rate higher in target A than target B Rate of contacts who opened the email and then enrolled in the free course higher in target A than target B Impressions, reach, likes higher in target A than target B Average cost per results lower in target A than target B	CRM (Active Campaign) CRM (Active Campaign) & eCampus Meta Business FB
Can a causal link be established between growing numbers of learners in free self-guided distance learning courses and growing numbers of learners in fee-based courses?	Share of participants in fee-based courses citing prior participation in a free self-guided distance learning course as reason for enrolment Return on marketing investment (ROMI)	2% conversion rate free to fee-based[6] 1:5	Online survey Online Survey

5.3.   DESCRIPTION OF THE DATA SET

The data warehouse of the Centre stores information from a number of ITCILO in-house databases plus data sources from the transactional and external environment. These databases furnish information about the beneficiaries of the distance learning offerings of the Centre as they move through the marketing funnel to convert into participants.

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[5] Glossary:
Open Rate: the percentage of email recipients who open a given email.
Click-to-open rate: the click-to-open rate (CTOR) compares the number of unique clicks to unique opens. This number indicates how effectively the email message, design and content performed, and whether it created enough interest in the recipient to take action (Source: https://www.campaignmonitor.com).
Impression: number of times content is displayed.
Reach: number of people who see the content.
Likes: number of post likes.
Average cost per results: calculated by dividing the total amount spent by the number of results (for example, reach, clicks, conversions, video views).

[6] A 2% to 5% free-to-paid conversion rate is considered good industry practice. Source: https://www.appcues.com/product-adoption-academy/free-to-paid-conversion/what-is-free-to-paid-conversion.

The marketing funnel for distance learners
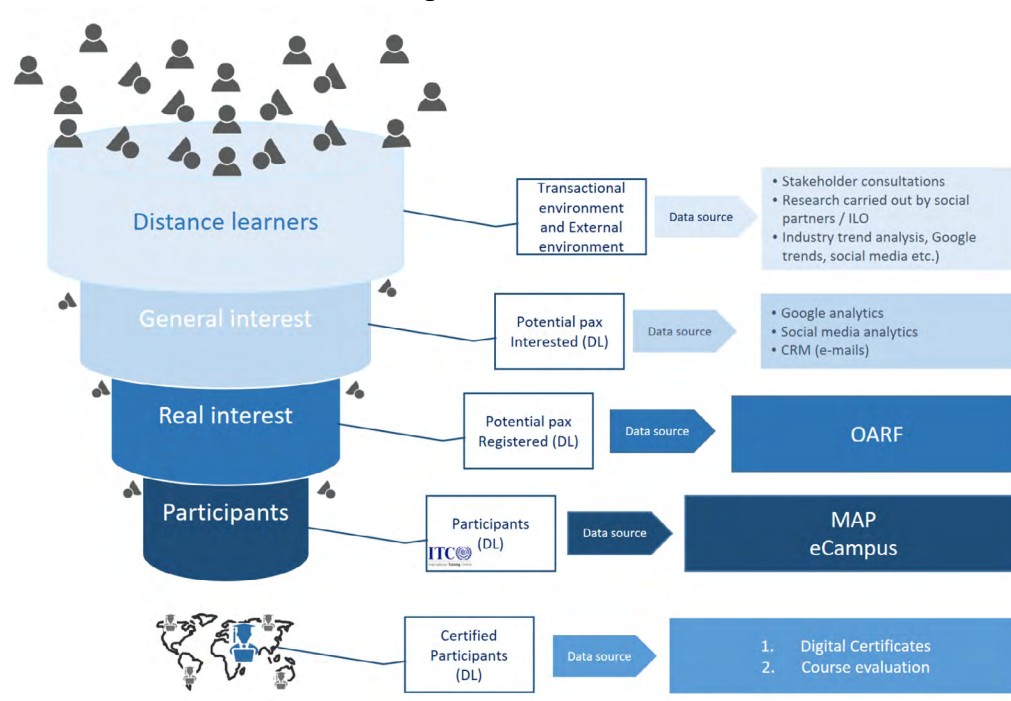
More specifically, the following data sources can be mined [7]:

- In-house databases:
    - **OARF** (registration form): all participants who register for open/master/academy/tailor-made courses regardless of whether or not they later enrolled. Participants in free courses do not register and directly access the eCampus.
    - **MAP:** all participants enrolled in open/master/academy/tailor-made courses. Participants in free courses are not imported into MAP and directly access the eCampus.
    - **eCampus:** all participants enrolled in ITCILO courses and/or accessing the eCampus (including participants in free/open/master/academy/tailor-made courses).
    - **CRM** (software: SugarCRM currently used by the Centre; Active Campaign, new software that the Centre is testing in 2022): contacts of former participants registered in MAP and in OARF, and contacts who subscribed to the newsletter. In future, it is also planned to import in the CRM free courses participants from the eCampus database.
- Data sources in the transactional environment:
    - Stakeholder consultations
    - Research carried out by social partners
    - Research carried out by the ILO
- External databases:
    - Google Analytics
    - Social media Analytics
        - LinkedIn (page, group)
        - Facebook (ITCILO, TDS)
        - Twitter
        - Instagram
    - Accredible (for digital credentials)

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[7] For more information on the databases: https://docs.google.com/document/d/1fpMf0wtiwRaI-icVlEGohjnMJ3GISMRhjvimRVsbKGY/edit

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For the purposes of the experiment described in this paper, the Centre analysed *data from internal and external databases*. Illustrated below is the architecture of these internal databases, showing data flow for all types of learning activities. The graph shows that data about free self-guided distance learners is only recorded in the eCampus through the self-enrolment option. The different registration and enrolment pathways are explained by the fact that tutor-supported activities are fee-based and often subject to a selection process calling for additional information from the applicant.

The architecture of the internal participant databases of the Centre
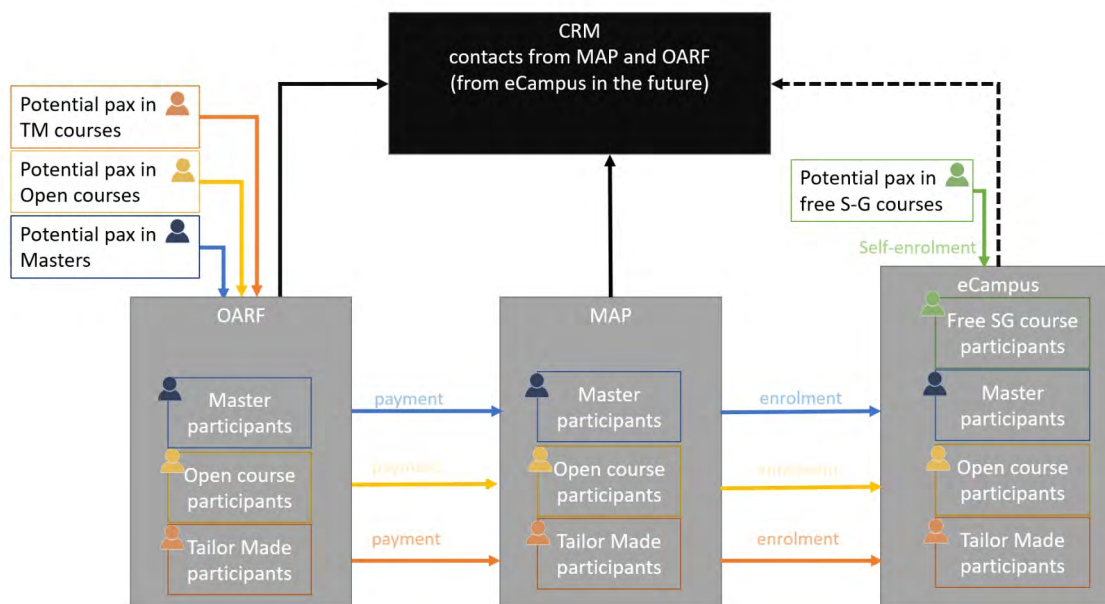
For the purposes of the experiment, *all* former participants in distance learning activities (both free and fee-based, and including tailor-made and open) offered by the Centre during the 2020–21 biennium were considered.[8] Thus, a total of 124,863 distance learners enrolled were in theory eligible for analysis and subsequent outreach campaigns, including 73,406 participants in free self-guided distance learning courses and 51,457 participants in fee-based distance learning courses. In practice, only parts of the database were used for the course-specific outreach campaigns, after being cleaned and checked for consistency.[9]

5.4   DESCRIPTION OF THE COURSE SAMPLE

At the time of the experiment, ITCILO offered more than 30 free self-guided distance learning courses (depending on the period of the year)[10]. The courses are standardized in terms of structure, quality and overall characteristics. A typical free self-guided distance learning course will comprise a series of short modules with videos, slides, quizzes and a final test. Participants who have successfully completed the test can download a certificate of completion as a micro-credential of their learning achievement. The

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[8] OARF was not considered because participants in free courses are not registered on OARF (see the data flow chart for more information).

[9] Refer to chapter on findings for more information on the data samples.

[10] ITCILO free courses page: https://www.itcilo.org/courses?field_course_typology[187]=187

minimum duration of a free self-guided distance learning course is one hour (equal to the smallest unit of learning distinguished in any learning activity of the Centre). For more information on each free self-guided distance learning course, refer to the online catalogue of the Centre[11].

For the purpose of the experiment, the Centre chose three free self-guided distance learning courses from the portfolio:

1   Business and Decent Work developed by the Sustainable Enterprises and Economies Programme (SEE)

2   Introduction to International Labour Standards (ILS) developed by the International Labour Standards and Gender Equality Promotion Programme (ILSGEN)

3   Introduction to Project Cycle Management developed by the Organizational Development and Project Management Services Programme (ODPS).

The first and second courses rank among the most successful self-guided distance learning activities in the 2020–21 biennium in terms of number of enrolments and, given the data availability, were chosen to verify whether their flagship status could be further boosted by targeted digital marketing. The third course was newly introduced in 2022 and launched during this experiment, and was chosen to benchmark results for flagship products against results for new and unknown service products. Another consideration was to choose only free-self guided distance learning courses on topics also covered in fee-based courses in order to shed further light on conversion rates from free to fee-based (the third research questions refers).

The top 10 free self-guided distance learning courses by number of enrolments (2021–2021)

Course Name	Participants	% of total enrolments in free courses
Fire Safety Management Course	8588	14%
Introduction to International Labour Standards	7253	12%
Essentials of fire safety inspections	6881	11%
Business and Decent Work: An Introduction to the MNE Declaration	4780	8%
Supporting SMEs during COVID-19	3733	6%
Financial Education	3114	5%
OHCHR HRC E-learning tool	2879	5%
CLE1: Introduction to ILS	2290	4%
Training for Rural Economic Empowerment	1898	3%
Disability in the Workplace: A Global Perspective	1857	3%

Source: e-campus

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[11]   ITCILO courses page: https://www.itcilo.org/courses

5.5 DESCRIPTION OF THE PERSONAE BEHIND THE TARGETED OUTREACH CAMPAIGN

As part of the experiment, the data set was filtered for profiles of prevalent participant groups. The characteristics of these prevalent participants were then used to construct personae to test the results of targeted outreach campaigns compared to the rest of the world.

What are personae in the context of this experiment?

For the purpose of this experiment, a "persona" was defined to be an abstract representation of the ideal participant, based on qualitative and quantitative data from research and existing customer profiles. Drawing a persona does not mean describing the organization's potential audience but rather generating insights that can be used to make informed decisions and efficient investments. Personae are important for:
- refining cross-channel promotional campaigns
- content creation (including email campaigns and blog posts)
- developing efficient and well-aligned products
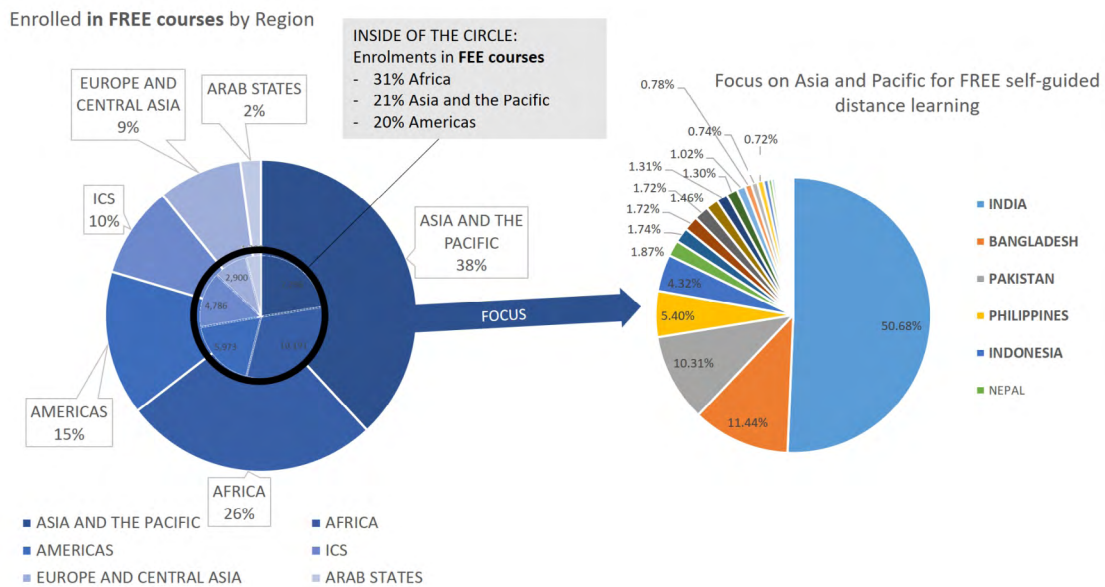- raising awareness on participants' characteristics

Personae can be designed considering the profile of former participants and the needs of specific minorities/vulnerable groups or any other identified needs.

The next step is **personalization**. Campaign Monitor shares data which found that emails with personalized subject lines are 26% more likely to be opened. That said, personalization requires first the identification and definition of the "persona". Not all personalization is created equal. *Getting personalization right is just as important as doing it in the first place* (for more information: https://www.campaignmonitor.com/features/email-segmentation/).

The data analysis revealed that, statistically speaking, the ITCILO 2020–21 former participants in free self-guided distance learning courses were likely to have been young (25 to 34), male, originating from the Asia and Pacific region (in particular: India, Pakistan and Bangladesh), and working in training/academic institutions, enterprises or NGOs. In order to test whether this general profile of free self-guided course participants could be representative for all, participants were analysed by subject area, to adjust for the over-prevalence of participants enrolled in OSH courses, in particular in the Fire Safety course and the Occupational Safety and Health courses (which together accounted for around 25 per cent of the total participants in free self-guided courses during the 2020–21 biennium).

When the analysis of the free self-guided courses was subsequently further refined, it was observed that the dominant age cohort remained the same across all courses (in other words, that distance learners are always more likely to belong to the age cohort 25–34 years) while region of origin and gender of the learners varied *significantly* according to course topic and according to the question of whether the course was offered for free or was fee-based. In the latter case, somewhat counter-intuitive to expectation, women were far more likely to enrol in fee-based courses (36 per cent of all enrolments in free self-guided courses compared to 49 per cent in fee-based distance learning courses). It is also interesting to note that in free self-guided courses women *outnumbered* men in the age cohorts 18–24 years and 25–34 years.

Breakdown of the universe of distance learners by region of origin 2020–21 biennium (free versus fee-based)

Enrolled in FREE courses by Region

INSIDE OF THE CIRCLE:
Enrolments in **FEE courses**
- 31% Africa
- 21% Asia and the Pacific
- 20% Americas

EUROPE AND CENTRAL ASIA 9%

ARAB STATES 2%

ICS 10%

ASIA AND THE PACIFIC 38%

FOCUS

AMERICAS 15%

AFRICA 26%

2,900
4,786
5,973
14,191

- ASIA AND THE PACIFIC
- AMERICAS
- EUROPE AND CENTRAL ASIA
- AFRICA
- ICS
- ARAB STATES

Focus on Asia and Pacific for FREE self-guided distance learning

0.78%
0.74%
0.72%
1.02%
1.30%
1.31%
1.46%
1.72%
1.72%
1.74%
1.87%
4.32%
5.40%
10.31%
11.44%
50.68%

- INDIA
- BANGLADESH
- PAKISTAN
- PHILIPPINES
- INDONESIA
- NEPAL

Breakdown of the universe of distance learners by age and gender 2020–21 biennium (free versus fee-based)

GENDER: participants in free and fee courses by gender (2020-21)

Fee-based:
- 49% female
- 51% Male

Free SG:
- 36% female
- 64% Male

36%
49%
51%
64%
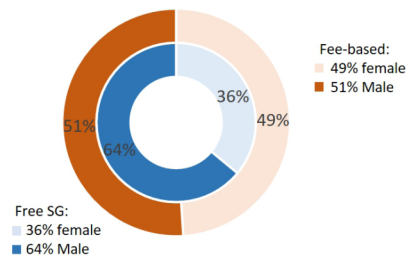
AGE: participants in free and fee courses by age (2020-21)
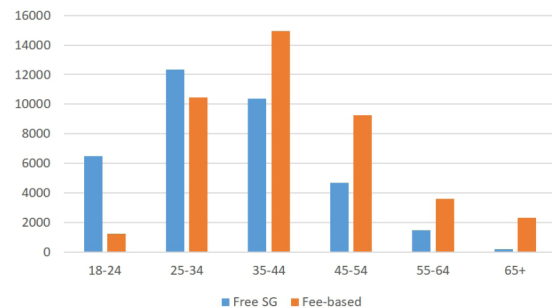
- Free SG
- Fee-based

Age / Gender	18-24	25-34	35-44	45-54	55-64	65+	Total*
FREE SG							
Female	3,187	4,343	3,705	1,780	557	66	26,353
Male	3,281	7,983	6,652	2,907	899	118	46,967
FEE-BASED							
Female	756	5,563	7,170	4179	1462	906	24,990
Male	461	4,892	7,776	5,069	2,158	1,409	26,053
Total*	7,686	22,782	25,308	13,935	5,076	2,499	124,863
FREE SG	6,468	12,326	10,357	4,687	1,456	184	73,406
FEE-BASED	1,218	10,456	14,951	9,248	3,620	2,315	51,457

*Including the NA data

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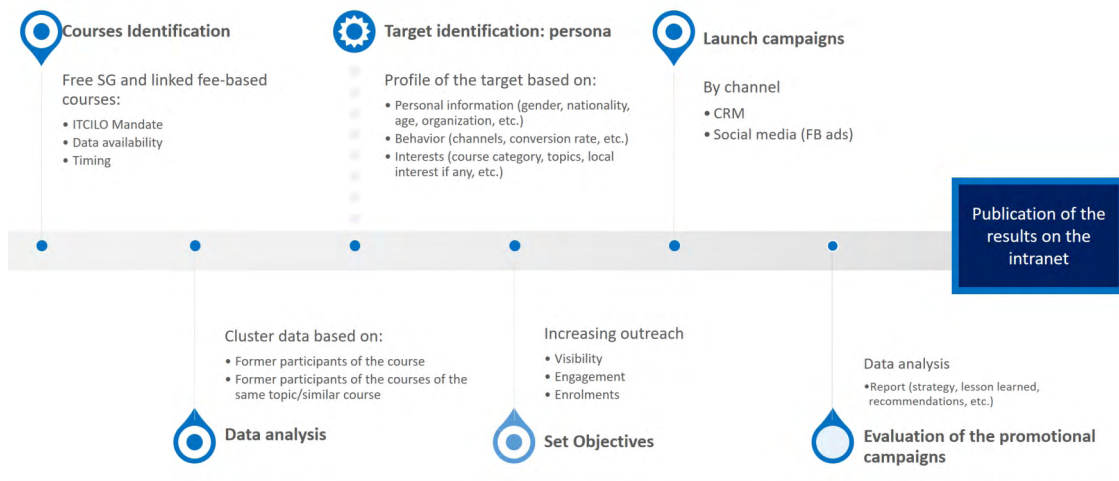Based on this analysis of the profile of past participants, it was decided to use gender and region of origin as segmentation variables to construct personae of potential leads. More in particular, three personae were developed for the experiment:

- For the Business and Decent Work course, the prevalent profile (PERSONA 1) were men originating from the African region (with country focus on Angola, Ethiopia, Ivory Coast and Nigeria) in the age cohort 25–44 years and working in the private sector, for government or in an NGO.
- For the introduction to ILS course, the prevalent profile (PERSONA 2) were women from Latin America in the age cohort 25–44 years working in the private sector, for government or in an academic institution.
- For the Project Management Cycle course, since the service had just been newly added to the eCampus, the profile of the fee-based courses in the same area of expertise has been considered. In this case, the prevalent profile (PERSONA 3) were men originating from the African region (with country focus on Algeria, Tunisia, Cameroon, Burkina Faso and Morocco) in the age cohort 35–44 years and working in an NGO, a UN organization (other than the ILO) or for government.

5.6   IMPLEMENTATION ROADMAP

Illustrated below are the steps of the implementation plan underpinning the experiment. The plan was implemented over a five-month period from May to September 2022.

Promotion on free SG courses

Courses Identification

Free SG and linked fee-based courses:
- ITCILO Mandate
- Data availability
- Timing

Target identification: persona

Profile of the target based on:
- Personal information (gender, nationality, age, organization, etc.)
- Behavior (channels, conversion rate, etc.)
- Interests (course category, topics, local interest if any, etc.)

Launch campaigns

By channel
- CRM
- Social media (FB ads)

Publication of the results on the intranet

Cluster data based on:
- Former participants of the course
- Former participants of the courses of the same topic/similar course

Data analysis

Increasing outreach
- Visibility
- Engagement
- Enrolments

Set Objectives

Data analysis
- Report (strategy, lesson learned, recommendations, etc.)

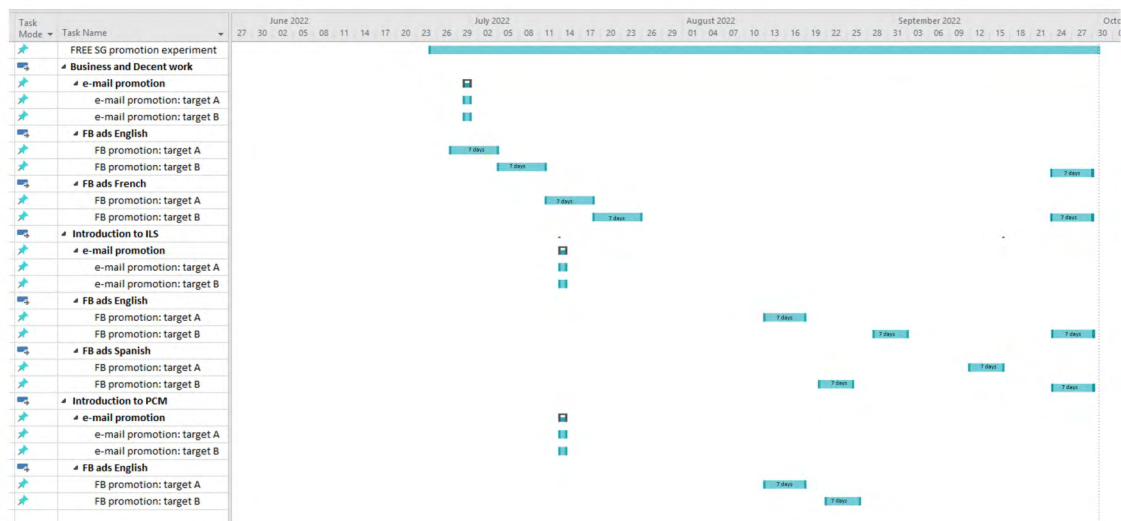**Evaluation of the promotional campaigns**

The preparatory stages of the experiment, including concept design, data preparation, data analysis and discussions, took place in May and June. The actual promotional campaigns were run from July to September through two different digital marketing channels:

- The CRM campaigns were launched in three waves, one wave per course on 30 June (Business and Decent Work), 14 July (ILS) and 18 July (Project Cycle Management). Accordingly, the effects of these campaigns on course page views and enrolment became visible in different calendar weeks.

- The social media campaigns via Facebook Ads were implemented again in three waves, one for each course. To test good practices, the Introduction to ILS and Business and Decent work courses were promoted in English and also in Spanish and French respectively. The Introduction to PCM course on the other hand, being available only in English, was exclusively promoted in English. The duration of each campaign was one week[12].

Each wave in turn was divided by target audience: target A, based on the personae identified in the analysis (gender and region) and target B as the control group, including the rest of the world.

The GANTT below shows the timing and duration of the email and social media campaigns.

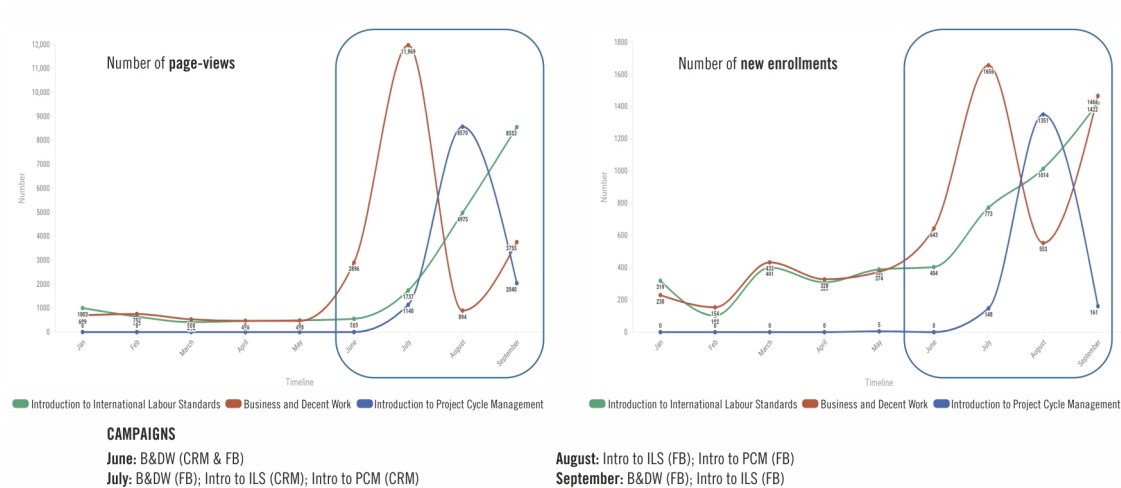The evaluation and documentation of the results of the experiment took place in October.

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[12] Considering that the efficiency of a social media campaign depends on the day of the week, it is recommended to launch a one-week (seven days) promotion. Source https://adespresso.com/

DATA-DRIVEN SERVICES TO INCREASE THE TRAINING OUTREACH OF THE CENTRE VIA THE PROMOTION OF FREE SELF-GUIDED DISTANCE LEARNING COURSES

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6 FINDINGS[13]

6.1 RQ 1: CAN DIGITAL MARKETING INCREASE UPTAKE OF FREE SELF-GUIDED DISTANCE LEARNING COURSES?

The graphs below show the trend of course page views and successive enrolments before, during and after the outreach campaigns; the spike in interest is clearly visible and there is strong correlation between page views and enrolments. As a direct result of the campaigns, the Centre registered 43,635 additional page views and 38,382 unique page views from 28 June to 30 September 2022 that resulted in 8,473 enrolments.

Number of page views and enrolments triggered by the digital marketing campaigns per month

CAMPAIGNS
June: B&DW (CRM & FB)
July: B&DW (FB); Intro to ILS (CRM); Intro to PCM (CRM)

August: Intro to ILS (FB); Intro to PCM (FB)
September: B&DW (FB); Intro to ILS (FB)

A closer look at the number of enrolments on a given calendar day during the campaign period sheds further light on the link between campaign broadcasts and enrolment. As the next graph shows, enrolments spike in direct response to each broadcast.

Number of enrolments triggered by the digital marketing campaigns per day

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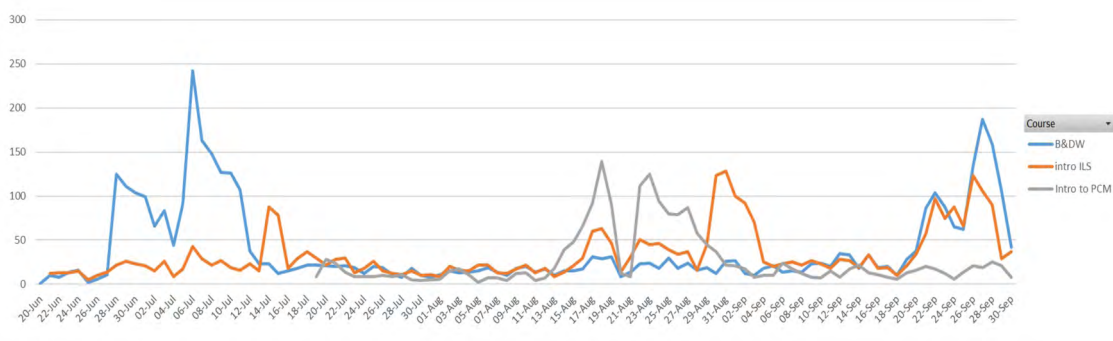
[13] To access the graphs and the excel file used to prepare this chapter click here.

The next graphs show the impact of different digital marketing tools at a higher resolution level. For all three courses, paid Facebook campaigns have a stronger impact on page views than email campaigns but it is not evident to what extent the effects are compounding. It should be noted that for these three campaigns, the reach of social media campaigns was far greater than that of email (which was based on existing contacts).

The (compound) effects of digital marketing on enrolments
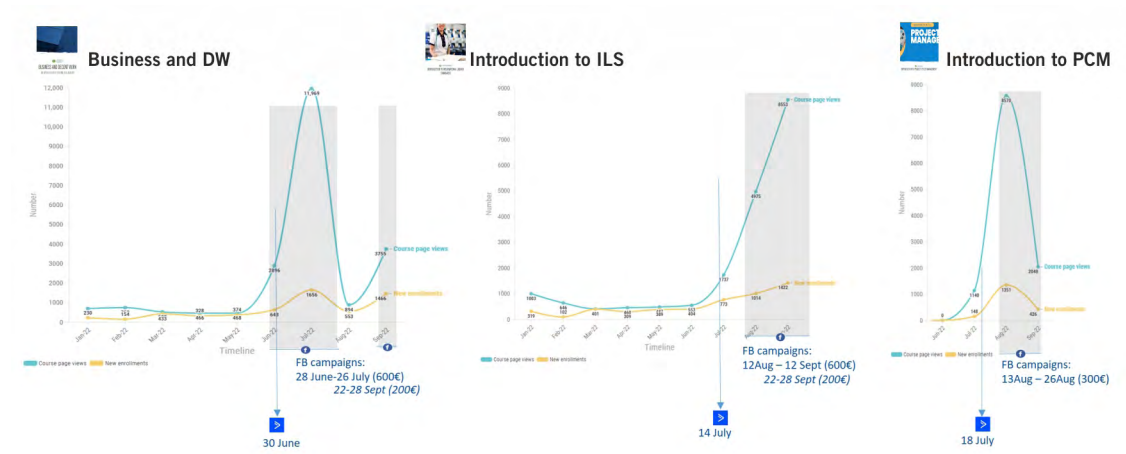
The table below drills deeper into the results by course, showing that for all but one course, the KPI specific performance thresholds were met or exceeded. Only the Introduction to ILS course did not totally achieve the expected growth in number of enrolments of 500%, merely having increased by 450% during the reference period.

Course-specific target and results

			Results			
		BASELINE[14]	Target* (baseline* KPI)	June	July	September
Business and DW	Page views	583	3,498	2,896	**11,969**	**3,755**
	Enrolments	303	1,515	643	**1,656**	1,466
				July	August	September
Intro to ILS	Page views	594	3,564	1,737	**4,975**	**8,553**
	Enrolments	321	1,605	773	1,014	1,422
Intro to PCM	Page views	299	1,794	1,140	**8,570**	**2,040**
	Enrolments	252	1,260	148	**1,351**	426

*For page views the target is 600% of the baseline
*For enrolments the target is 500% of the baseline

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[14] The baseline was calculated considering the average of the previous months in 2022 of the course. Because Introduction to PCM is a new course launched in June 2022, the average of all free SG courses was considered as baseline.

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6.2   RQ 2: CAN TARGETED DIGITAL MARKETING AIMED AT POTENTIAL LEARNERS WITH CHARACTERISTICS SIMILAR TO PREVALENT PROFILES OF PAST LEARNERS FURTHER INCREASE UPTAKE?

Focus on CRM

As part of the CRM-supported course-specific email campaigns, the Centre also tested whether targeted emails would result in higher response rates. Each campaign therefore had two groups of recipients:

1   Target A: potential participants with characteristics conforming to the persona of the prevalent group of participants in earlier distance learning courses of the Centre;

2   Target B: control group, here all other contacts in the respective database.[15]

Course-specific target profiles

TP	Course title	Sent Date	Target cluster	Target profile	Language(s)
SEE	Business and Decent Work	30/06/2022	**A**	Persona 1	FR, EN
			B	Rest of the world	EN
ILS	Introduction to International Labour standards	14/07/2022	A	Persona 2	SP, EN, FR
			B	Rest of the world	EN, FR, SP
ODPS	Introduction to Project Cycle Management	18/07/2022	A	Persona 3	EN
			B	Rest of the world	EN

The campaign results show that potential participants with a persona resembling the prevalent profile of past participants were significantly more likely not only to open the email and click on the link but also to enrol in the course. More specifically, open rate, click-to-open rate and click rate[16] was always higher for target A (target A 36%, 36% and 13% respectively over target B 27%, 29% and 8% respectively). Furthermore, for target A, the rates in all three campaigns were in all cases above the benchmark for a good response rate in the education sector[17].

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[15] Please note here that the mailing list for each CRM campaign was limited to names of former participants who had enrolled in courses with topics falling into the same areas of expertise as the topic of the free self-guided distance learning courses. This meant that for the Decent Work and Sustainable Business course and Introduction to ILS, the mailing list for target group A was comprised of 379 and 994 people and for target group B of 1,603 and 9,428 people respectively. For the course Introduction to Project Cycle Management, the list of contacts who subscribed to the newsletter was considered, and the figures were 521 people for target group A and 9,768 people for target group B.

[16] **Open Rate:** the percentage of email recipients who open a given email; **Click-to-open rate:** the click-to-open rate (CTOR) compares the number of unique clicks to unique opens. This number indicates how effectively the email message, design and content performed, and whether it created enough interest in the recipient to take action; **Click-rate:** the percentage of email recipients who click on the link.

[17] Campaign monitor https://www.campaignmonitor.com/resources/guides/email-marketing-benchmarks/ Mailchimp https://mailchimp.com/it/resources/email-marketing-benchmarks/

Aggregate results of the email campaigns promoting the free self-guided distance learning courses

Target / Course Title	Open Rate	Benchmark (education) 28%	Click to Open Rate	Benchmark (education) 15.70%	Click Rate	Benchmark (education) 4.40%
Target A	**36%**	↑	**36%**	↑	**13%**	↑
B&DW	45%	↑	19%	↑	8%	↑
Intro to ILS	32%	↑	37%	↑	12%	↑
Intro to PCM	39%	↑	48%	↑	19%	↑
Target B	**27%**	↓	**29%**	↑	**8%**	↑
B&DW	27%	↓	13%	↓	4%	↓
Intro to ILS	26%	↓	31%	↑	8%	↑
Intro to PCM	38%	↑	40%	↑	15%	↑
Total	**28%**	=	**31%**	↑	**9%**	↑

	Target A	Target B	Benchmark in EDUCATION
Open Rate			28%
Click to Open Rate			28%
Click Rate			28%

The course-specific results show that the rates are always higher for target A than target B. In particular, with reference to the effect on outreach, it is interesting to see that the conversion rate (calculated by comparing the list of contacts who opened the email with the list of contacts who then enrolled in the free self-guided distance learning courses) is higher for target A. This means that targeted email marketing aimed at potential learners with characteristics similar to prevalent profiles of past learners further increases uptake.[18] In turn, ad hoc email campaigns can be sent with the purpose of reaching out to the vulnerable and underrepresented.

Course-specific results

| Course Title / Target	# Sends	# Opens	# Clicks	# Enrolments*	Open Rate (sends/opens)	Click to Open Rate (clicks/opens)	Click Rate (clicks/sends)	Conversion Rate (opens/enrolments)
B&DW	**1,874**	**561**	**83**	**32**	*15%*	*30%*	*4%*	*6%*
A (African M)	339	151	28	12	19%	45%	8%	8%
B	1,535	410	55	20	13%	27%	4%	5%
Intro to ILS	**10,415**	**2,758**	**869**	**97**	*32%*	*26%*	*8%*	*4%*
A (Americas F)	994	319	118	13	37%	32%	12%	4%
B	9,421	2,439	751	84	31%	26%	8%	3%
Intro to PCM	**1,289**	**491**	**213**	**53**	*43%*	*38%*	*17%*	*9%*
A (African M)	521	203	98	32	48%	39%	19%	11%
B	768	288	115	21	40%	38%	15%	7%
Grand Total	**13,578**	**3,810**	**1,165**	**182**	*31%*	*28%*	*9%*	

Number of contacts enrolled after opening the email

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[18] This is NOT to say that digital outreach campaigns should always be targeted at potential leads with profiles similar to prevalent groups in past activities – they might as well and very effectively be used to reach underrepresented people in the beneficiary universe but knowing that costs will be higher and/or conversion rates lower.

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Focus on social media ads

Further to channel-specific outreach campaigns, the experiment likewise included an A/B test of targeted Facebook campaigns over non-targeted Facebook campaigns whereby, similarly to the CRM campaign, target group A was constructed based on the course-specific personae while target group B was the rest of the world. The campaigns were run in English, Spanish and French (in the latter case for the course on ILS and the course on Decent Work and Sustainable Business respectively due to the personae) and built around key words and Facebook user interests linked to the course topics. As described earlier, the visibility of the Centre significantly increased during the campaign period, with up to 121 likes per day over an average of 5 likes per day in the month before the campaign. However, in terms of total number of people reached, results for target group B were always significantly higher due to the sheer scale of the global Facebook network. The effect was most pronounced in Facebook campaigns run in English.

New ITCILO Facebook Page likes
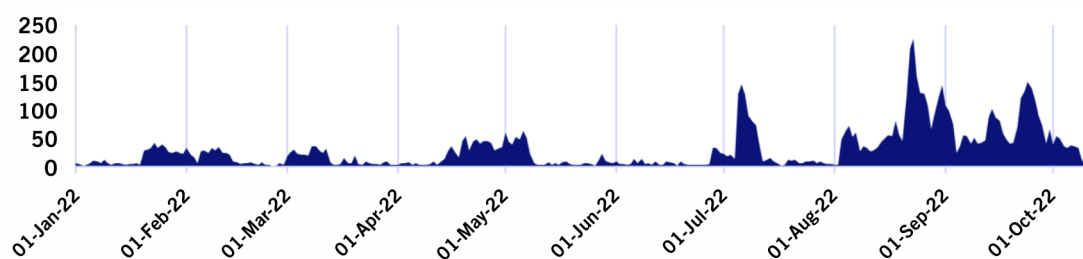
**Aggregated campaign results by language and target**

Language	Impressions	Reach	Likes	Average cost per results	
EN	3,496,623	2,037,249	7,713	0.5	↑
SP	1,488,518	831,069	3,126	1.9	↓
FR	715,918	284,368	645	6.6	↓
Total	**5,701,059**	**3,152,686**	**11,484**	**2.1**	

Target	Impressions	Reach	Likes	Average Cost per results	
A	1,968,976	1,000,211	1,920	2.9	↓
B	3,732,083	2,152,475	9,564	1.8	↑
Total	**5,701,059**	**3,152,686**	**11,484**	**2.1**	

Key: **Impression:** times content is displayed; **Reach:** number of people who see the content; **Likes:** number of post likes; **Average cost per results:** calculated by dividing the total amount spent by the number of results (for example, reach, clicks, conversions, video views).

6.3   RQ 3: IS THERE A CAUSAL LINK BETWEEN GROWING NUMBERS OF LEARNERS IN FREE SELF-GUIDED DISTANCE LEARNING COURSES AND GROWING NUMBERS IN FEE-BASED COURSES?

Finally, to check for a causal link between growing numbers of learners in free self-guided distance learning courses and growing numbers of learners in fee-based courses, the experiment focused on participants who had enrolled first in a free self-guided course and later in a fee-based distance learning course while the promotional campaigns were underway. A total number of 233 participants fell into this group, out of which 132 participants had converted from free to fee-based (in other words, they had enrolled in the free self-guided distance learning course first)[19].

Freemium participants
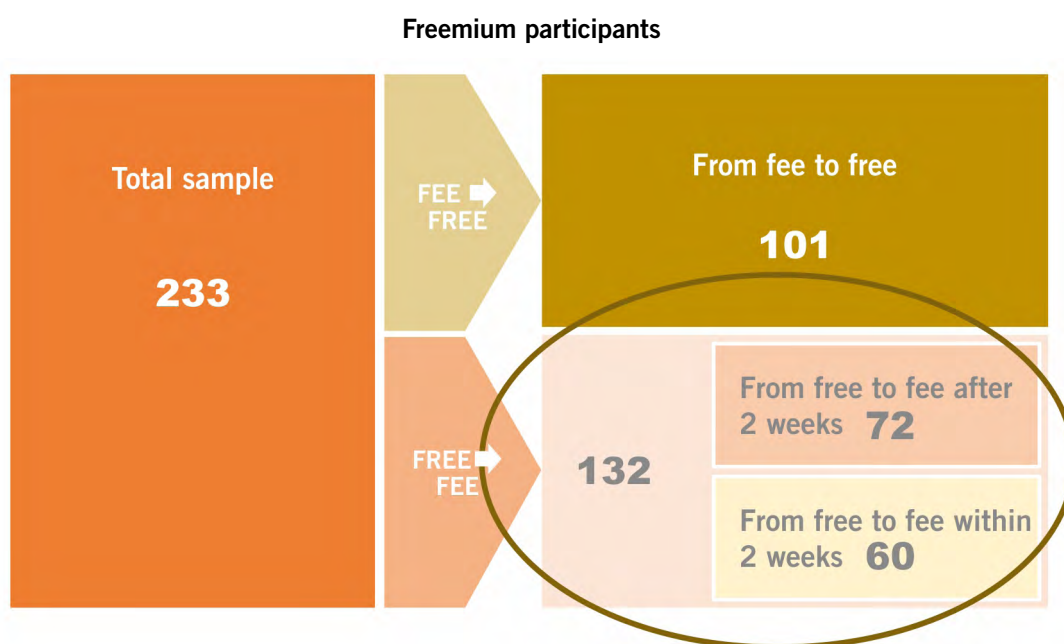
A closer look at freemium participants[20]

Aggregate data	Total number during the promotion time (June/Aug/Sept)
New enrolments in free SG courses	7,398
Enrolled in both free and fee-based courses (regardless of the time sequence)*	233
From free to fee-based (potential freemium)	132
From free to fee-based after two weeks**	72
Participants enrolled in one of the three free SG promoted courses subsequently after two weeks enrolled in:	
• Topic related courses	12 (16%)
• Any other course in the same TP (Open/Master/Academy)	15 (21%)
• Any other ITCILO course (Open/Master/Academy)	45 (63%)

*considering both free to fee-based and fee-based to free
**counting only those who subsequently enrolled in the fee-based course at least 2 weeks after the day of enrolment in the free course

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[19] Typically, the peak enrolment in fee-based courses occurs in the 2 weeks before the course begins.

[20] Freemium: users converting from free to fee-based activities.

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To establish causality between enrolment in a free self-guided distance learning course and enrolment in a fee-based distance learning course, an online survey covering the 132 potential freemium participants was conducted. 41 participants responded, out of which 17 stated that they had applied as a result of email promotion and 7 stated they had applied as a result of the Facebook campaign. 28 respondents confirmed that they had converted from free to fee-based after testing the self-guided distance learning course; on a side note, 13 respondents had enrolled in a free course after having completed a fee-based course first, implying that conversion can go both ways.

NOTABLY, 11 out of 12 participants converting from free to fee-based had enrolled first in the free course "Introduction to project cycle management". One peculiarity of this course, compared to the other two analysed, is that at the end of this course participants are encouraged to start a learning journey with four fee-based learning activities that eventually lead towards the award of a diploma on project cycle management. It was also interesting to see that participants in free self-guided courses then enrolled in fee-based courses in very different areas of expertise.

To express the financial potential of conversion, the table below depicts revenue from confirmed freemium users in terms of income from fee-based courses. The return on marketing investment (here: costs of paid Facebook campaigns only) was 16,635 euros income over 1,900 euros expenditure, equal to a ROMI of 1:9.

Results of the survey	Number	Revenue (euros)
Recipients	132	
Answers	41	
Fee-based to Free (confirmed)	13	
Freemium (confirmed)	28	16,635
Freemium: from email	17	11,575
Freemium: from social media (FB)	7	5,060

7 CONCLUSIONS AND RECOMMENDATIONS

7.1 CONCLUSIONS

The findings imply that digital marketing can improve uptake of free self-guided distance learning courses. Course page views and subsequent enrolments significantly increased during the experiment on the back of a social media campaign and email marketing activities.

Campaigns targeted at potential distance learners with profiles similar to prevalent groups of distance learners in past learning activities can significantly further drive up response rates in the case of email marketing. In turn, where Facebook Ads campaigns are concerned, absolute numbers of people reached are higher when campaigns are not tailored to personae due to the sheer scale of the global network of Facebook users. This also means that Facebook Ads campaigns might be more effective at raising general awareness and reaching new audiences about a distance learning offering while targeted emails are more effective at converting potential leads. For best results, the two channels could be combined.

As regards the question of whether personae of prevalent groups of former participants can serve as a blueprint for targeting messages at potential leads, age cohort (25–44 years) combined with interest in a given topic due to professional background seems a strong denominator of inclination to enrol in a distance learning activity while region of origin and gender are far less reliable predictors. Not surprisingly, language of instruction can tilt enrolments in given regions even though English seems the preferred medium of instruction across the beneficiary universe. Interestingly, women were as likely as men to enrol in fee-based courses, somewhat refuting popular assumptions about their heightened vulnerability when accessing the digital learning highway.

The experiment points towards a causal link between growing numbers of learners in free self-guided distance learning courses and growing numbers in fee-based courses. Generally speaking, the absolute number of enrolments in fee-based courses increases on the back of growing numbers in free self-guided distance learning courses, as a certain proportion are likely to continue their learning journeys *provided* they had a quality learning experience.

Notably, causality can play out both ways, with trainees converting from free to fee-based and vice-versa. The conversion rates tend to increase when a link to a related learning activity is added at the end of a given learning activity, ideally combined with an incentive to continue along a multi-step learning journey (like the prospect of attaining a diploma).

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7.2 RECOMMENDATIONS

For Technical Programmes:
- Systematically promote distance learning offerings to stimulate service uptake in unit-level areas of expertise.
- Promote free self-guided distance learning activities as entry-level experiences potentially leading towards follow-up enrolments in related (or also non-related) activities.
- Incentivize follow-up enrolments by embedding links to follow-up training activities at the end of the free-self guided distance learning course and by offering the prospect of graduating towards a higher-level learning credential like a diploma.
- Use social media in general and Facebook Ads in particular to boost CRM and increase the universe of contacts including from vulnerable groups.
- Use Facebook campaigns to significantly increase visibility and product awareness across the beneficiary universe; focus on English as preferred medium of interaction.
- Further to Facebook campaigns:
  - use English as Facebook Ads are more effective in English
  - target by keywords, interests, areas of expertise, job and sectors in order to reach the interested target group (targeting by geographic area and gender is less effective)
  - keep the audience engaged with organic posts immediately after the paid one(s)
  - once the Facebook Ads are launched it is necessary to check the trend at least every two days, respond to comments and possibly adjust the target by changing interests, keywords and so on, if needed
- Focus on targeted email campaigns to follow-up on potential leads, customize message to language of recipients and known interest in topics.

For Office of the Director of Training (TDIR):
- At regular intervals, promote all free self-guided distance learning courses as part of Facebook Ads campaigns to the beneficiary universe.
- Alternatively, or in addition, draw on the central CRM database to launch feature campaigns promoting course packages linked to themes prioritized by the ILO, like fundamental rights, employment creation and so on.
- Carry out follow-up experiments to further investigate:
  - other channels for increasing training outreach among core constituents and targeting groups with known vulnerabilities. In particular, with the support of LIP, carry out experiments combining social media ads and organic promotion for increasing both outreach and engagement.
  - the casual link between the number of participants in free self-guided and fee-based courses and how to maximise the enrolments in both free self-guided and fee-based distance learning courses.
  - other possible segmentation variables for understanding participants' interests and trends.
- Support Technical Programmes to develop additional free flagship self-guided distance learning courses.
- Periodically inform the TPs with trends and statistics on the participants' profiles and behaviours, and outreach actions.

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