Evaluation of Enterprise Ireland e-Business Management Initiative 2006-2011

April 2015



Department of Jobs, Enterprise and Innovation An Roinn Post, Fiontar agus Nuálaíochta

5. Enterprise Ireland e-Business Management Initiative 2006-2011

Programme logic model

Objectives

- To help Irish companies improve their digital marketing tools, capabilities and strategies
- To reach and engage more strongly with potential international customers and increase exports



Inputs

- Enterprise Ireland grants
- Company costs (cash and in-kind)
- Indirect Enterprise Ireland costs



Activities

- Advice from El business advisers
- Support and advice from consultants
- Training in digital marketing strategy and skills
- Consultancy and support to undertake e-business projects
- Support to enhance web capability and online marketing

Outputs

- No. of companies supported
- No. of projects undertaken
- No. of staff trained
- Companies supported to develop digital marketing strategy
- Staff trained on digital marketing tools
- Companies with written digital marketing
- Improved staff capabilities on tailoring website to individual overseas markets



Outcomes and Impacts

- Improved online marketing effectiveness
- Overcoming barriers to trade in terms of access to information and knowledge flow
- Expansion to new overseas markets
- More processes that include use of ICT technologies
- Higher level impacts: Increased productivity/exports/new employment

Evaluation aim

The aim of this evaluation is to assess the appropriateness, efficiency, and effectiveness of the e-Business Management Initiative (eBMI). The evaluation timeframe incorporates inputs from the period 2006-2011 with outputs and outcomes measured through to 2012. Technopolis consultants were commissioned by Forfás to undertake research and analysis on its behalf.

Programme background, objectives and target population

Over the evaluation period eBMI (2006 to 2011), the eBMI programme supported 262 companies, through 309 approved grants for a value of approximately €4 million. It represents a small support in comparison with other supports provided by Enterprise Ireland.

Under the eBMI, companies could apply for two different phases:

- Phase 1: A one-day consultancy advice. This phase was not expected to involve any training and was directed towards companies at a very early stage of introducing eBusiness applications. Again the documentation provided does not provide examples of what qualified as an 'eBusiness application'.
- Phase 2: Planning and implementation of a selected eBusiness project and the transfer of knowledge and skills to key personnel within the company.

Companies could apply for a maximum grant of €20,000 (for both phases). The grant should cover no more than 50 percent of the total cost of the project.

Originally (in 2006) the initiative had a broad scope. Its main objective was to increase client companies' capabilities with regards to Information and Communication Technologies (ICT), in order to maximise their competitive advantage. According to the 'eBusiness Funding Offer Planning Review (2010)', prepared by Enterprise Ireland's eBusiness Unit, the programme was designed to improve the 'eBusiness/ICT management capability of Enterprise Ireland's SME clients, through [a process of] active based learning'.

The programme was established in the context of the eBusiness Strategy, published in 2004 by the Department of Enterprise, Trade and Employment, which identified the need to increase the uptake of ICT among Irish SMEs. The original objective of the programme was also aligned with Enterprise Ireland's focus on increasing productivity among SMEs in response to a deceleration in productivity growth between 2000 and 2005.

The programme in its original design had a very low uptake within client companies. In 2006, only 12 grants were approved under the eBMI. This low uptake challenged the assumption that client companies had a strong demand for the deployment of new platforms and information technologies.

This led to a natural shift from a programme with a broad remit (i.e. enhancing ICT capabilities) towards a programme with a more specific focus. In its next iterations, the programme was focused on helping companies to develop their online marketing and website development capabilities. From 2007 onwards a stronger focus was placed on helping companies to increase their online presence and the use of their websites as an enabler to engage and reach potential international clients and to improve their overall relationship with customers. In fact, grants were

¹ Some companies had more than one grant approved

approved based (among other things) on the potential impact that the consultancy assignment could have on the companies' ability to compete in international markets.²

Furthermore, according to the survey and interviews with consultants and companies, the grant was not used to develop e-commerce related activities, such as increasing the sales and purchases made via the Internet, though again, some companies may have used the grant with that purpose when the programme was launched in 2006. This change in objectives reflects Enterprise Ireland's disposition to adjust their offers to their client company needs. However, the fact that the change has been undocumented has posed challenges for this evaluation, mostly with regard to the design of the programme logic model and the data collection of the relevant metrics to assess the appropriateness and effectiveness of the programme.

Programme rationale

The rationale for each Enterprise Ireland programme is embedded in a hierarchy of objectives that originate in Ireland's National Development Plans (NDP). The NDP's over-arching objectives of growth and jobs are sub-divided into in a number of priority areas. The priority area 'Enterprise, Science and Innovation' covers the activities of Enterprise Ireland in support of Irish businesses.³ As Ireland is a small economy with a limited domestic market, the focus of Enterprise Ireland's activities is explicitly on maximising export-driven company growth.

The hierarchy of objectives relevant to eBMI seems to be straightforward (although it was not made explicit in Enterprise Ireland's documentation on the programme).⁴ An increase in the use of digital tools could allow client companies to reach more and engage more strongly with potential international customers, and consequently expand their businesses to overseas markets.

It appears that some Enterprise Ireland client companies were not engaging enough in these kinds of activities. For instance, they did not have well-developed websites, or they only had a website that was restricted to the domestic market in terms of content and overall lay-out. There was also a low use of other tools such as search engine optimisation (SEO), software to manage customer relationships, web analytics to gather data on web visitors, dedicated web pages to allow for enquires, and outreach tools such as social media and e-newletters.

The underpinning economic rationale for business support of the type offered by the eBMI (and many other of Enterprise Ireland's business support programmes) does not neatly fall within the neo-classical economics approach to market failures but instead aligns with the concept of 'capability failures' in the innovation systems literature. Capability failures are linked to the view of the firm as a 'learning organisation' and are defined as "inadequacies in companies' ability to act in their own best interests, for example through managerial deficits, lack of technological understanding, learning ability or 'absorptive capacity' to make use of externally generated technology". While the innovation systems literature generally focuses on technology-based

² Other criteria included analysing the appropriateness of the cost and nature of proposed assignment and the extent to which the company had met previous targets agreed with Enterprise Ireland

³ The Enterprise, Science and Innovation priority also directs the work of other agencies such as IDA and SFI

⁴ The hierarchy of objectives in the existing documentation on the programme states that participation in the programme could lead to an increase in productivity, which in turn could allow companies to be more competitive and increase their presence in international markets

⁵ Arnold, E., Thuriaux, B., developing Firms' Technological Capabilities, Technopolis, 1997. The concept of capability failures is also defined by others such as Edquist, C., Chaminade, C., From

innovation it can also apply to process-related innovations such the use of digital tools to implement marketing strategies.

ICT, digital marketing and internationalisation

The literature suggests that the use of ICT and digital marketing can be powerful tools to increase internationalisation, especially among SMES. This use of ICT tools can help to make a more effective use of resources by lowering marketing communication costs (as communication becomes highly scalable), increased contact between buyers and sellers and reduced information float time as mechanisms are put in place to provide rapid responses to queries (such as the implementation of Customer Relationship Management software). It can also help them improve their efficiency and develop new ways of coordinating activities.

ICT tools and digital marketing can also help SMEs overcome some or all of the barriers they face when conducting international business, including the 'liability of foreignness' (all costs associated with not being local) and resource scarcity (relative to bigger companies). As the transactional and communicational capabilities of ICT have increased, the use of the Internet and digital tools has become an efficient, effective enabler of international expansion and global trade, the phenomenon of *Internalisation*. 9

In this sense, it seems appropriate to provide support to client companies to develop their online/digital marketing activities to increase their presence in overseas markets if they do not have the necessary capabilities to develop those skills on their own.

Evaluation methodology

Desk research

The evaluation commenced with a review of documentation provided by Enterprise Ireland and Forfás, including: Enterprise Ireland Annual Reports (2005-2012); Enterprise Ireland Corporate Strategy (2005-2008 and 2008-2010) and 'eBusiness Funding Offer Planning Review (2010)'.

theory to practice: the use of systems of innovation approach in innovation policy, CIRCLE Electronic Working Papers, CIRCLE, Center for Innovation, Research and Competences in the Learning Economy, Lund University

⁶ Bell, James and Loane, Sharon (2010) 'New-wave' global firms: Web 2.0 and SME internationalisation. Journal of Marketing Management, 26 (3-4). pp. 213-229

⁷ Fletcher, Richard, Bell, Jim and McNaughton, Rod (2004) International E-business Marketing. Cengage Learning EMEA

⁸ Arenius, Pia, Viveca Sasi and Mika Gabrielsson (2005) "Rapid internationalisation enabled by the Internet: The case of a knowledge intensive company," Journal of International Entrepreneurship, Springer, vol. 3(4), pages 279-290, December

⁹ Mathews, Shane W. and Marilyn J. Healy, (2008) "From garage to global": the internet and international market growth, an SME perspective. International Journal of Internet Marketing and Advertising, 4(2/3), pp. 179-196

Data sources

The three sources of secondary data are used in this evaluation:

- Annual Business Survey of Economic Impact (ABSEI). The database gathers the results of the surveys that Forfás administers annually since 2000 to Irish-owned and foreign-owned firms in Ireland. Data collected include sales, employment and exports for the period 2000-2012; and value added and R&D expenses for the period 2000-2011. ABSEI also provides information on the industry, region and type of ownership of the company. 10
- Enterprise Ireland client database. This database includes the population of grants approved by Enterprise Ireland since from 2005 to 2012. Available information includes the approval year, amount provided and amount granted, and the details on the type of programme. This database indicates that between 2005 and 2010, Enterprise Ireland approved grants under the eBMI to a total of 262 companies.
- Forfás Annual Employment Survey. This database provides longitudinal information since 1972 on employment levels in manufacturing and services companies under the remit of IDA Ireland, Enterprise Ireland, Shannon Development and Údarás na Gaeltachta. 18,784 company sites are present in the database.

Of the 262 companies that had grants approved for the eBMI, there is information from the Employment survey for 254 companies, and from ABSEI for 210. The final overlap consists of 203 companies that participated in eBMI and are also present in both ABSEI and the Employment Survey databases. For these 203 companies it is then possible to obtain information not only on the involvement on the eBMI but also information on performance indicators such as exports, sales and employment. Furthermore, this information on performance is available even before the programme started, which means it is possible to describe and analyse trends in performance before, during and after the programmes ended.

Online survey and Interviews

An online survey was conducted in order to collect primary data on outputs and outcomes, but also further data on impact and attribution. The survey was sent on 1st October 2013 to a selected 219 companies. The survey remained open for three weeks three reminders were sent to boost response rates. A total of 77 companies responded to the survey, amounting to a 35 percent percent response rate. This number of responses is sufficient to permit a reliable analysis of the survey findings that is representative of the overall population. The survey questionnaire contained five main sections: objectives and outcomes; satisfaction with the programmes; impact of participation; wider effects; the global economic downturn. In addition, a programme of 13 semi-structured interviews was conducted with programme participants and stakeholders.

Counterfactual analysis

In order to identify a causal relationship between inputs and activities of the eBMI and its final impacts a counterfactual analysis is conducted. *Propensity score matching* (PSM) has been used to

¹⁰ Standard routines for outlier's identification and treatment were performed before using ABSEI data in the analysis

¹¹ Some companies were excluded on the basis that they were participating in other surveys/evaluations at or close to the time. Firms that were no longer trading and email bounce backs further reduced down the survey population

create a group of comparable companies. The score was created based on information available in the four years prior to the start of the company's participation in the eBMI. The PSM for the eBMI evaluation was based on the following firm characteristics: age of the company; value of exports; exports intensity; productivity (sales per employee); sales; information on participation in other programmes.

For further detail on methodology see **Technical Annex**.

Inputs

Direct costs

The programme had a total direct cost of €2,638,211 in grant payments from 2006-2011. Most of the resources were allocated from 2008 onwards, as the initiative had a low uptake in the first years of implementation.

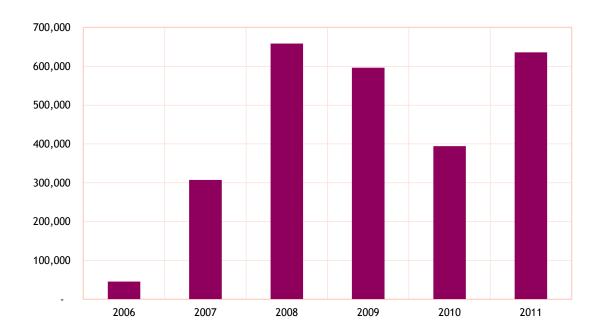


Figure 5.1: Direct cost - eBMI

Source: Technopolis (2013). Enterprise Ireland client database

Financial contributions of the companies

For Phase 1, Enterprise Ireland could cover up to 50 percent of the total cost of the project proposed by companies when applying for a grant. For Phase 2 different rules applied depending on the location and the size of the company. It is estimated that companies made a total contribution of €7,287,919.

Table 5.1: Financial contributions of the companies

	Grant paid	% Eligible expenditure	(Estimated company contribution)
Phase 1	€20,077	50%	€40,154
Phase 2	€2,618,134		€7,247,765
Regional Breakdown			
Dublin			
SME	€1,038,420	35%	€2,966,915
Large	€136,327	25%	€545,309
Other regions			
SME	€1,290,897	40%	€3,227,243
Large	€152,489	30%	€508,297
Total (Phase 1 & 2)	€2,638,211		€7,287,919

Source: Technopolis (2013)

Indirect costs

Based on the number of Full Time Equivalents working on the programme the cumulative indirect costs for the years 2006-2011 are €475,653.

Outputs and activities

Company participation

Companies get involved following their DA's advice or suggesting the participation themselves. Companies that are interested in participating are referred to the eBusiness Unit (now Internet Marketing Unit, IMU), which then helps the company to flesh out what specific kinds of assistance they may need and recommends areas on which the company should focus.

Many of the companies interviewed became aware of the programme through seminars organised by Enterprise Ireland.

Companies have 18 months to use the grant after approval. Consultancy expenses incurred after the deadline are not covered by the grant. Consultants expressed during the interviews that many companies take a long time to engage in grant-related activities after the grant is approved. This implied that if, for instance, 12 months have passed since approval, there is only 6 months left to implement the consultancy assignment. This creates a problem, insofar as a consultancy project that could (or should) have lasted 9 to 12 months has to be delivered in 6 months.

Selection of consultants by companies

Consultants are chosen from a list of 45 companies published by Enterprise Ireland. Consultants were located in different counties but the majority (25 consultants) operate in Dublin. Enterprise Ireland states that 'the fact that a consultant is included on the list is no guarantee of the consultant's competence or that the consultant is suitable for [the company's] particular assignment'. Furthermore, it also explained that 'no liability will accrue to Enterprise Ireland, for either the company's choice or the consultant's performance'.

Enterprise Ireland encourages applicants to undertake a thorough selection process. In some cases, the IMU provides a short list of 3-4 companies that may be more suited for the needs of the particular company. The process of selecting consultants differs from company to company. According to the interviews with client companies there were at least 3 modalities:

- Word of mouth and prior knowledge- or by attending consultants' speeches at e-Business
 Initiative events organised by Enterprise Ireland
- Invitation to tender proposals
- Interviews

Factors such as location played an important role when deciding to choose a consultant, as well as the 'value for money offered' by them. According to the survey 88 percent of client companies are very satisfied or satisfied with the programme in terms of the access to relevant consultants.

Activities as part of the grant

The grant could be used for training and advice activities, but not for the implementation of the recommendations made by consultants. For instance, the implementation and building of the website was not an eligible cost.

Regarding training, there are no are conditions established about the number of trained employees, or the level of involvement of senior members of staff in the process. Enterprise Ireland does not follow a 'one-size fits all' approach and rather designs its programmes (including eBMI) following a customised approach that covers a wide range of eligible activities.

Each company that applied for an eBMI grant prepared a draft application form explaining their motivation to participate and propose a plan. The draft application would include proposed project plan and breakdown of daily tasks, activities and rates. The IMU review the draft application and offer comments regarding content, gaps in the plan, eligible activities to ensure it meets client needs. The company finalises the application based on the IMU recommendations and submits an online application to Enterprise Ireland.

Companies must present a final report to be able to draw down the resources of the grant, which details the activities actually undertaken. Projects are only deemed complete when they are assessed against the original plan. All claims submitted by clients are reviewed firstly by the Grants Payment Department and then the IMU to identify ineligible activities.

Activities undertaken by the consultants

As already suggested, the activities undertaken under the grant depend on companies' needs and demand. However, there is evidence that indicate consultants also played an important role in driving the process.

The programme provided client companies with the flexibility to choose which components of the online marketing offer they wanted to explore and develop as part of the grant. This means that in practice each company engaged in different activities and obtained different outputs. For instance, some companies focused more on developing an overarching business strategy that could be totally or partially implemented by using digital tools. Other companies, who already had a clear understanding of online marketing, used the resources of the grant to develop specific components such as improving the use of Search Engine Optimisation (SEO).

Figure 5.1: Four main activities undertaken with consultants

Search Engine **Customer Relationship** Digital Analytics Strategic online campaign Optimisation Management Optimises website so it Tool to collect and Strategy to shape the System and technology transform digital data digital content on social appears higher on a to organise, automate search results page such into reports and analyses media platforms such as and synchronise sales, as Google (e.g. Google Analytics) Facebook and Twitter. marketing, customer online advertising, email advice and technical makerting support Aims at increasing traffic Digital analytics allow to the website monitoring the company's digital presence over time.

Source: Technopolis (2013)

The diversity of consultants available within the grant reflects the approach undertaken by Enterprise Ireland. Consultants have a range of strengths in specific areas (e.g. Strategy, SEO, market analysis, social media, etc.).

However, the interviews also point that a similar service is offered with different levels of intensity by different consultants. For instance, the actual content of the support provided to client companies to develop a digital marketing strategy was different for different consultants. While some consultants would include in their services workshops to help companies to develop and define their value proposition and overall medium and long-term vision, other consultants considered this kind of help to be beyond the scope of the grant (even if the company requested that service).

Furthermore, some consultants offered general advice on specific potential overseas markets, while others actually provided in-depth market research and helped companies to develop an overview of that market as a whole, not only in relation to their digital marketing strategy. Companies that received help to conduct market research in overseas markets received, then, a similar support to the one provided by the Internationalisation Support Programme (2005-2010) or the Going Global Fund (2009-present).

This difference in the intensity of the service provided implies that some companies have obtained more benefits from the grant than others, due to the differences in consultants. A better understanding of the different services offered by consultants, not only in terms of breadth but also in terms of depth, could help companies take a more informed decision.

It is worth noting that according to consultants, some companies were looking to develop their value proposition or overall strategic vision. Even though some consultants were happy to provide this service, this also suggests that the objectives of the grant may not be fully understood and

that companies are looking for support to define their overall strategy, to which online marketing is only one (albeit important) element.

Overview of grants approved and paid

In the period 2006-2011, the eBMI approved 309 grants, for an average of 1.18 grants per company. The total approved value of the 309 grants corresponded to €3,997,324, equal to 0.3 percent of the total amount approved for company support by Enterprise Ireland in the period 2006-2011.

Figure 5.2 shows the distribution over time of the number of companies supported and grants approved and the total amount approved each year by the eBMI.

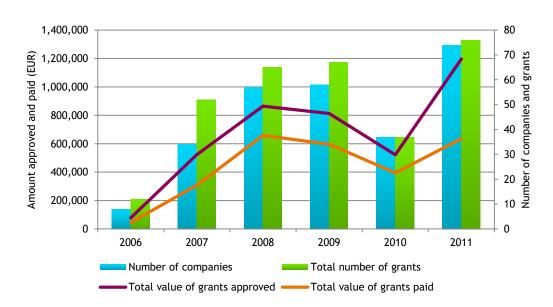


Figure 5.2: Total output indicators in 2006-2011 for the e-BMI, by year

Source: Enterprise Ireland client database

The output indicators of the eBMI increased rapidly from 2006 to 2008. In 2009 the level of output was similar to the previous year, while a drop in output indicators was registered in 2010. In 2011, all the output indicators of the eBMI reached their maximum.

It has been explained by Enterprise Ireland that in 2010, there was a period of approximately three months in which no grants were approved to any business support programme due to restrictions on the funds available for business support.

The drawdown rate

As in other Enterprise Ireland business support programmes, not all approved eBMI grants were drawn down entirely by companies. Drawdown rate, measured as the total amount paid over the total amount approved, was on average equal to 66 percent in the period 2006-2011. A similar pattern is observed among all Enterprise Ireland's business support programmes, which had an average draw down rate of 67 percent in the same period.

In terms of grant value, out of the €3,997,324 approved by the eBMI, €2,638,211 was actually drawn down by companies by the end of 2012 for which data was available.

There is no single pattern that explains companies' decision to not draw down resources.

An econometric exercise did not shed any light on the factors that could explain the probability of actually using an approved grant. This may mean that variables such as sales, exports, export intensity, years of approval, age of the company, region and sector do not provide 'any explanatory power' to the probability of using a grant approved. This also means that other factors not included in this list are more relevant or that the decision to draw down is taken based on the particular circumstances of each company.

In fact, companies in the survey were asked for their motivations to not draw down entirely the grants they had approved. Only 4 companies responded to this question. They indicated that they had a change in direction in terms of the promotion of their business on the website, or that they did not have the necessary resources (financial resources, staff) to be able to implement the grant, or that they were not able to structure the project in such a way that it would have fitted the grant requirements.

eBMI grants size in comparison with other Enterprise Ireland grants

The eBMI is a small grant in comparison with other types of support provided by Enterprise Ireland. In fact, the eBMI grants are on average 7 times smaller than other Enterprise Ireland grants during 2006-2011. The table below shows that the average values of grants approved and paid by the eBMI were $\[\]$ 12,936 and $\[\]$ 8,538, respectively. It also indicates that most companies actually are approved and paid an amount that is considerably below the maximum eligible (i.e. $\[\]$ 20,000).

Table 5.2: Output indicators for the e-BMI and all Enterprise Ireland business support in 2006-2011

	Average value approved per grant (€)	Average value paid per grant (€)
E-Business Management Initiative	12,936	8,538
All Enterprise Ireland business support (2006-2011)	88,074	59,003

Source: Enterprise Ireland client database

Outputs

A total of 262 companies have been supported by the eBMI. They represent only a small fraction (4.2 percent) of Enterprise Ireland's total client base (based on the client companies included in the database 2005-2012).

The profile of the companies awarded by eBMI changed over time. In this section the profile of companies that had grants approved for the e-BMI is examined. In particular the focus on:

- The size of the company in the year of the grant approval (number of employees and sales)
- The level of internationalisation of the company in the year of the grant approval (total exports and exports intensity, i.e. exports as a share of sales)
- The economic activity of the company receiving the grant(s)
- The geographical distribution of the company receiving the grant(s)

Size and level of internationalisation

The eBMI grants were by smaller companies with lower export intensity in comparison with other Enterprise Ireland clients. However the average size and the export intensity of the eBMI client companies increased in the final years of the grant.¹²

In the year of approval, companies that had an eBMI grant had on average 29 employees and €5.6 million sales, 36 percent of which came from exporting (Table 5.3). Other grants of Enterprise Ireland were approved to bigger companies, with similar export intensity.

Table 5.3: Client companies characteristics in 2006-2011

	Companies that were part of e-BMI	Other Enterprise Ireland client companies (2006-2011)
Sales	€5.6M	€13M
Employees	29	36
Export intensity	36%	37%

Source: Enterprise Ireland client database. ABSEI database. Technopolis (2013).

Over time, more export-intensive companies joined the eBMI as shown in Figure 5.3. However, the export intensity of eBMI companies approved in 2010 and 2011 was actually higher in comparison with other Enterprise Ireland client companies. This means that in the last years of the programmes, the scheme was targeting companies with relatively high experience in overseas markets (as those companies had a grant approved). It is likely that for companies that already have presence in international markets, the grant will only have a marginal effect.

¹² Since this information is based on the year of approval it does not reflect the impact of the programme and only shows evidence on the type of companies that were included in the programme

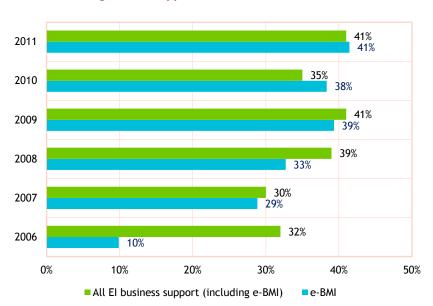


Figure 5.3 Average export intensity (export over sales) of the client company in the year its grant was approved

Source: Enterprise Ireland client database, ABSEI database.

Economic activity

About two thirds of eBMI grants were approved to companies in the manufacturing sector. However, 'ICT services' (which includes technology-based companies and ICT consultancy) is the most represented individual sector.

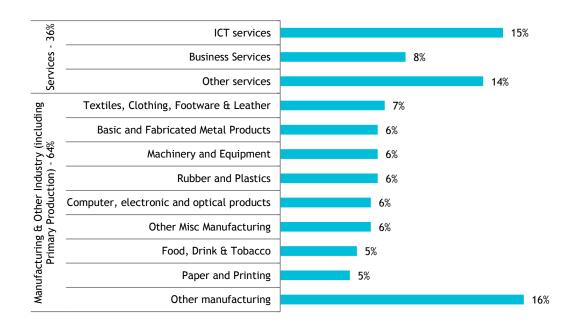


Figure 5.4: Distribution of eBMI grants per main economic activity

Source: Enterprise Ireland client database, ABSEI.

Geographical location of support companies

Almost half of e-BMI grants were approved to companies located in the Dublin region. The distribution of e-BMI grants across Ireland's geographical regions is 43 percent of the grants were approved to companies whose headquarters are in Dublin, and 20 percent to companies in the Border, Midland and Western region. The remaining 37 percent of grants were allocated to companies in the rest of the South and East regional assemblies. This distribution is not dissimilar from the distribution of all Enterprise Ireland grants approved in 2006-2011. ¹³

Prior support

In terms of previous support by Enterprise Ireland, 74 percent of the 262 companies had received support by other programmes of Enterprise Ireland in the period 2005-2012 (period for which there is information from the Enterprise Ireland client database).

Outcomes

The evaluation on outcomes focuses on three potential outcomes that could have been generated through the programme.

- Improve online marketing capabilities (Digital Marketing)
- Improve ICT Capabilities more generally (ICT capabilities)
- Increased online presence for international markets and expansion to new overseas markets (Internationalisation)

The information presented in this section is based on the information obtained from the survey and the interviews.

Reasons to join the eBMI

The vast majority of companies joined the programme with the objective of improving (or building) their company's reputation and brand in overseas markets (93 percent), improving their overseas marketing strategy (85 percent) and online presence (86 percent) and improving or enhance the company's main website (85 percent). Furthermore, around three quarters of the companies had the objective of improving or enhancing the company's main website for specific overseas markets (75 percent).

However, a significant number of companies indicated that they joined the programme to develop ICT skills and capacity. Companies state that increasing the percentage of sales made via the internet (61 percent), developing ICT skills and capacity (47 percent), applying ICT to improve processes or management practices (39 percent), and increasing the percentage of purchases made via the internet (22 percent) were also objectives taken into consideration when taking the decision to apply for a grant.

¹³ A formal test indicates that the distribution across areas for e-BMI grants and other Enterprise Ireland grants is not significantly different, $\chi^2(2)=2.90$, p-value>0.1

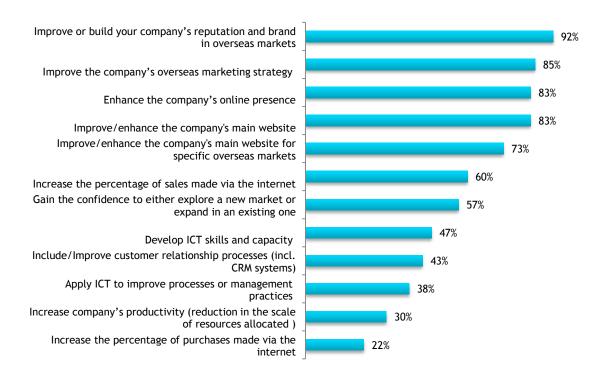


Figure 5.5: Companies objective to participate in the grant

Source: Companies' survey. Between 53 and 59 companies answered this question.

Digital marketing

The scheme appears to have had a moderately positive effect on companies' ability to implement a digital marketing strategy.

According to the responses obtained from the companies' survey, more than three quarters of companies (78 percent) state that the company has improved or enhanced its website as consequence of the support provided by the eBMI grant. However, only half of the companies (53 percent) state that the objective of enhancing the company's online presence has been fully or mostly achieved (score 4 and 5). An even lower percentage (45 percent) of respondents state that the objective of improving customer relationships processes has been fully or mostly achieved (score 4 and 5). These percentages are based on the number of respondents who state that each of these items was an original objective in their decision to join the programme, so they do reflect companies' expectations in terms of potential outcomes.

This is likely due to the fact that the programme does not cover the implementation activities. As already mentioned, the consultancy project undertaken with client companies ends with a series of advice and recommendations on how to implement an online marketing strategy. It is then up to the companies to invest and allocate the necessary resources to implement those recommendations, as well as the knowledge and skills acquired during the training.



Figure 5.6: Achievements: Digital marketing

Source: Companies' survey. Based on 31 to 54 respondents that answered the question

These results seem to suggest that many companies do not undertake further related projects to implement the recommended online marketing strategy. In fact, less than half of companies (41 percent) state that they have continued with related activities after the grant ended.

Only 24 companies provided further examples of projects undertaken, (shown in Figure 5.2) which includes implementing different online tools (such as Multimedia video for channel sales and marketing, a global collaboration toolset) or implementing Customer Relationship Management (CRM) processes. Some further projects also include product development, which implies that the recommendations and advice that some companies get out of the consultancy (as part of the grant) are related to the business as a whole at not only to its online presence.

Search Engine Optimisation (2)

Product Development (3)

Other (5)

CRM processes (5)

(Other) online marketing tools (9)

Figure 5.2: Other related projects undertaken

Source: Companies' survey

40 percent of respondents (25 companies) state that further additional staff were trained in 'ICT management and marketing techniques' (outside the grant). Furthermore, 72 percent agree or strongly agree that skills developed have been sustained since the grant came to an end, while 50 percent agree or strongly agree that those skills have been expanded across all company activities (see Figure 5.7 and Figure 5.8).

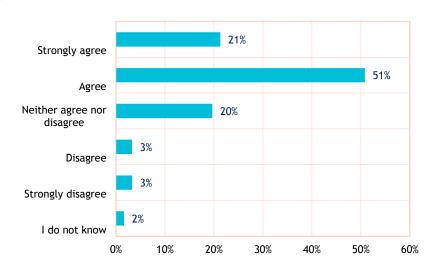


Figure 5.7: Wider effects: Skills sustained

Source: Companies' survey. Based on 63 respondents

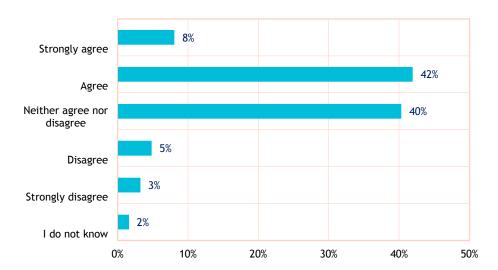


Figure 5.8: Wider effects: Skills expanded

Source: Companies' survey. Based on 63 respondents

Furthermore, all companies interviewed (as opposed to surveyed) were highly satisfied with the scheme. They expressed that the consultancy project has helped them to understand the potential impact that the use of online marketing could have in their company's ability to expand and grow. The companies are now actively engaged in related activities, including:

- Using Google Analytics to profile their potential customers, based on information on visitors geographical location
- Setting up Search Engine Optimisation to make sure that their website appears in the relevant searches made online
- Using social media, such as LinkedIn, to maintain contact with relevant networks
- Preparing and sending regular newsletters to inform their client base on recent developments, as well as participating in other online publications
- Using services such as web conferencing or 'webinars' to promote their activities, but also
 to showcase their products and to provide technical assistant to customers
- Having a dedicated web page to attend potential customer queries and follow up potential leads

In all of those cases, companies invested further resources into implementing the recommendations made by consultants. Furthermore, in most of the cases companies continue their relationship with the consultant outside the grant - companies have contracted consultants to receive permanent advice, to undertake follow-up activities, and to further train their staff. This seems to be a constant feature in all the companies that found the grant to be successful in enhancing digital marketing capabilities.

This does not imply that designing a programme, in which only training and advice is provided, is fundamentally wrong. However, it provides evidence that follow-up activities are fundamental to achieve success. In that sense, Enterprise Ireland could consider including a follow-up phase to these kinds of schemes, to increase the number of companies that have a successful experience

ICT capabilities

A smaller fraction of companies joined the scheme to improve their ICT capabilities (as shown above). This of course includes companies that joined the programme under its original design, companies that had the expectation of developing those capabilities, even after the programme changed in focus, and companies that see 'online marketing' as a fundamental part of their overall ICT capabilities.

Of those companies that had these objectives in mind, half of them stated that the objective of applying ICT to improve processes or management practices and, more generally, of developing ICT skills and capacity have been mostly or fully achieved (score 4 and 5). These results are in line with results shown in the prior two subsections, and it is very likely that they are strongly related to companies' development on the use of the Internet to deploy marketing activities.

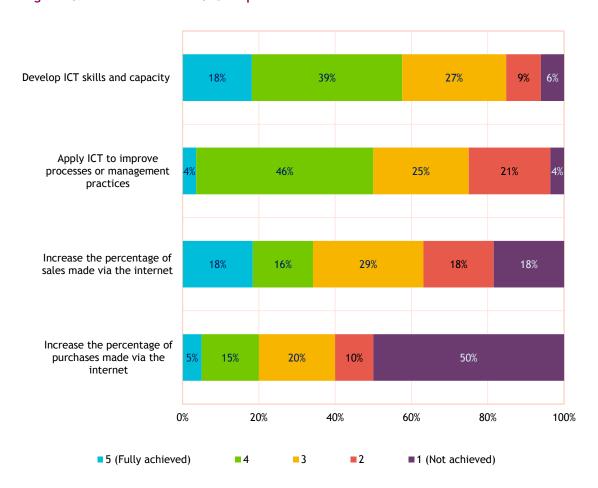


Figure 5.9 Achievements: ICT capabilities

Source: Companies' survey. Based on 20 to 38 respondents that answered the question

The results related to e-commerce (sales and purchases via the internet) suggest that some companies did join the programme with the intention to improve their e-commerce capabilities, even after the programme changed in focus. In fact, 60 percent of respondent companies stated that they joined the programme with the objective of increasing the proportion of sales made via the Internet. Only one third of the respondent companies stated that this objective has been fully achieved or mostly achieved.

Companies were also given the chance the express 'what particular feature of the eBusiness Management Initiative contributed most strongly to its effectiveness as a mechanism to improve ICT capabilities? (E.g. training, support to prepare strategy, etc.)'. Most respondents named training (31 percent) and support to prepare strategy (27 percent) as the main features, which were examples provided in the question.

Other companies named the access to financial support and access to experienced consultants as features of eBMI that contributed more strongly to its effectiveness.

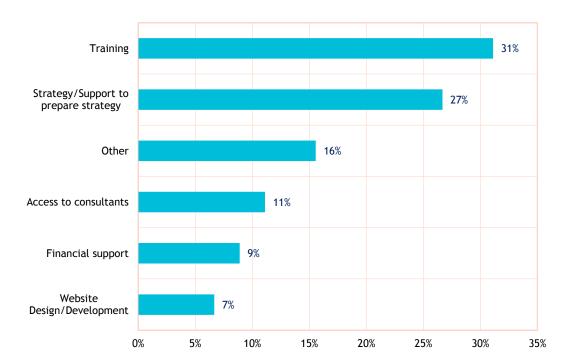


Figure 5.10: Feature of eBMI that contributed the most to is effectiveness

Source: Companies' survey. Based on 45 respondents.

Internationalisation

Results are less positive in terms of Internationalisation. Only half of the respondent companies state that the objectives of improving (i) the company's main website for specific overseas markets (55 percent), (ii) the company's reputation and brand in overseas markets (52 percent), and (iii) the company's overseas marketing strategy (50 percent) have been mostly or fully achieved (score 4 and 5). Again, these percentages are based on the number of respondents that state that each of these items was an original objective in their decision to join the programme, so they do reflect companies' expectations in terms of potential outcomes.

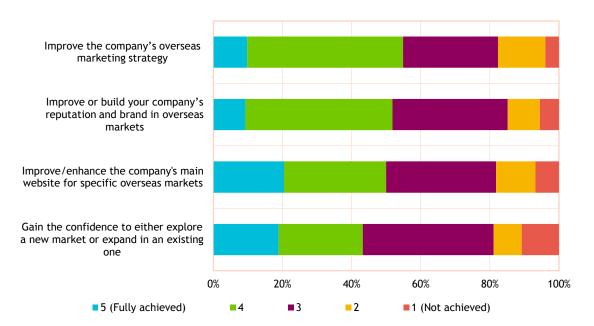


Figure 5.11: Achievements: Internationalisation

Source: Companies' survey. Based on 37 to 54 respondents that answered the question.

Most of the companies interviewed mentioned that, following the advice provided by the eBMI consultants, they developed a series of online tools to engage with potential customers. This in turn has led in their opinion to a substantial increase in the number of 'spontaneous' enquires from potential international customers.

These companies explained that before the grant, they did not have an adequate platform (e.g. a section on their website) to allow potential customers to ask questions, request quotes or just start engaging with the company. However, in most of the cases, companies interviewed expressed that these leads had not yet materialised in overseas sales, although they are confident these will materialise in the near future.

This is also consistent with survey responses. More than three quarters of the companies expressed that they have entered a new overseas market or are expected to do so in the foreseeable future (i.e. 1 or 2 years from now) as a consequence of the support provided under the eBMI grant. This indicates that companies are optimistic about the *future* potential positive effects that implementing different online tools would have on their sales to external markets.

The UK is the main destination of those companies that have already entered a new market, followed by other European destinations, as shown in Figure 5.12.

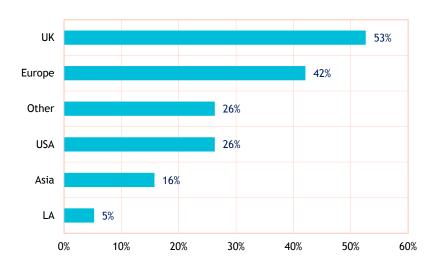


Figure 5.12: New markets entered

Source: Companies' survey. Only if they answered 'yes' to the prior question, shown in the figure above. Based on 38 respondents

Concluding remarks

This section shows that eBMI has generated moderate positive effects with regard to companies' digital marketing capabilities. All other indicators related to digital marketing have been achieved or fully achieved by half of the companies or less. Success seems to be closely related to the ability of companies to invest further resources for the implementation of the advice and recommendations made by consultants, or even more, the ability (and decision) to maintain a working relationship with consultants once the grant is over. In those cases, companies are very positive about the scheme and the effect it has had and would have in their business.

Regarding internationalisation, only about half of the companies stated that objectives related to developing the website for specific overseas markets, improving the company's overseas marketing strategy and the company's reputation and brand in overseas markets have been fully achieved. However, about two thirds of the companies state that they have entered new overseas markets as a consequence of the supported provided by the programme. This implies that simple features such as the use of Google analytics, Search Engine Optimisation and social media are helping companies to engage with potential overseas customers, even in the absence of an 'overseas marketing strategy' or a dedicated website.

Impacts

Overview and key feature of the analysis

Following the PLM, the final impact of the programme is measured based on its ability to help companies to increase their exports and to become more export-oriented. The methodology section provides a full description of the econometric analysis, however some key features of the statistical and econometric analysis are summarised here:

The statistical analysis performed here (also called univariate analysis) provides estimation
of change for each indicator (e.g. exports) before and after the company participated in the

programme. Furthermore, it tests whether any 'observed' change is statistically significant. This provides a first view on the performance for those that participated in the programme.

- However, this is not an appropriate estimation of impact since any change in performance has to be compared to what would have happened in the absence of the support provided by the programme. The control group provides this counterfactual scenario.
- The control group has been selected using a state of the art technique (propensity score matching, PSM), to guarantee that both groups (participants and non-participants) are very similar and that the main observable difference is their participation in eBMI.
- Since most of the companies in eBMI have been part of other Enterprise Ireland business support programmes, the analysis can only show what the difference is in performance on being part of the eBMI plus other types of programmes versus only being part of other types of programmes. In other words, it shows the extent to which eBMI contributes to the potential effects generated by the different mix of supports offered by Enterprise Ireland to its client companies.
- If, for instance, exports of non-participant companies grew more than exports of participant companies, then there is no reason to believe that this increase is due to the programme and it is most likely to be explained by an overall trend and/or by effect of being part of other Enterprise Ireland business support programmes.
- A key issue when interpreting these results is that the econometric estimation focuses on changes in performance indicators, given that it is the change of the indicator (and not its level) that provides the estimation on impact.
- Finally, the graphs shown in this section are only presented to show the trends for each group. They do not provide a graphic representation of the counterfactual analysis, as this analysis provides a case-by-case analysis that takes into account the year in which the company actually started participating in eBMI. The key point here is that not all companies started the programme at the same time and the 'before' and 'after' is different to different companies.

Exports

Exports of companies that participated in the eBMI programme have increased over time, as it is shown in Figure 5.14. In fact, it is estimated that, on average, companies have increased their exports by 163 percent between the first year they participated and two years after their participation ended. This period was included, as it is assumed that it takes at least two years (since approval) for the effects to materialise. This result is statistically significant.

In fact, before the programme started (2000-2005) participant companies had average export sales of €1.7 million and there is a clear upward trend in exports during that period. However, these trends can be also observed among the control group (see Figure 5.13).

Moreover, after the programme starts, exports for the control group increase at a higher pace in comparison with exports of companies that participated in the eBMI programme.

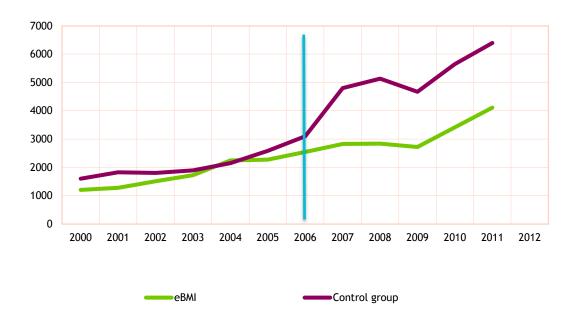


Figure 5.13: Trends in (average) value of exports ('000)

Source: Based on ABSEI data

However, in conducting a full counterfactual analysis, and comparing these results against the performance of the control group, it is found that there are no effects on exports due to participation in the eBMI. Furthermore, eBMI does not show positive results in terms of exports even in interaction with other Internationalisation Support Programmes.

Some additional testing was also conducted to see whether the results were being driven by companies in a particular sector (e.g. manufacturing), as anecdotal evidence suggested that more traditional companies were more reluctant to implement the advice and recommendations given by eBMI consultants. However, there were no differences in results when, for instance, the manufacturing sector was excluded from the sample.¹⁴

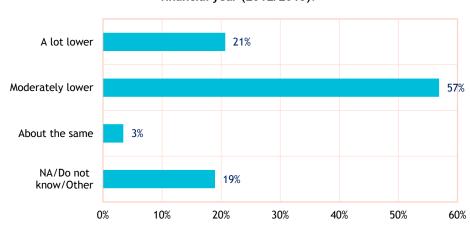
The results from the econometric analysis contradict the results obtained from the survey. Survey respondents were asked to estimate how much higher (or how much lower) their **export** in 2012/13 would have been in the absence of the support provided by the eBMI. Approximately 78 percent of respondents state their exports in 2012/13 would have been lower or a lot lower without the support from Enterprise Ireland.

_

¹⁴ It has to be noted, however, that this estimation is based only on a few observations and hence is less robust in comparison with the results for the full sample

If no support had been received from the eBMI, how different do you think your exports would have been in the last complete financial year (2012/2013)?

Figure 5.14: Companies' self-assessment: Exports



Source: Companies' survey

Furthermore, the companies were provided with bands to estimate how much lower exports would have been. A rough estimate (based on the bands' middle points) shows that companies estimate their exports would have been approximately 22 percent lower. The differences between the observed positive trend, the positive self-assessment and the econometric results could be explained by several factors, including methodological differences (see <u>Technical Annex</u>).

The observed growth in value of exports among participant companies (163 percent) could be explained by an overall upward trend. Hence, once the upward trend of the control group is taken into account (in the econometric analysis) this positive effect disappears.

Another possible explanation is that the overall trend and positive self-assessment is explained by the overall support provided by the combination of several other Enterprise Ireland business support programmes. In fact, eBMI participants have had on average 8 other grants between 2005 and 2012. It is difficult to assess whether companies are able to isolate the effect of eBMI (from other Enterprise Ireland business support programmes) when making their self-assessment. It is not possible to tell whether companies' response actually corresponds to an assessment of their interaction with other Enterprise Ireland programmes, and whether companies are not being able to isolate the effect of eBMI from the (presumably) positive effect of other types of support. Additionally, this type of the self-assessment usually suffers from an 'optimism bias', which implies that surveyed companies could be overestimating the impact of the programme.

There are further methodological reasons that could explain the difference between the self-assessment and the econometric results - these are outlined in the Technical Annex.

Export intensity

Over time, eBMI client companies have become more export-oriented and this is shown in Figure 5.15. In fact, it is estimated that on average, companies have increased their export intensity by 27 percentage points, from 19 percent to 46 percent between the first year they participated and

two years after their participation ended. Again it is assumed that it takes at least two years (since approval) for the effects to materialise. This result is also statistically significant.

However, and similarly to the behaviour observed in the case of the value of exports, the trend for the eBMI client companies is very similar to the trend for the control group, which suggested that this increase in export intensity has been common to all Enterprise Ireland clients, partly no doubt to the support provided through the different thematic areas.

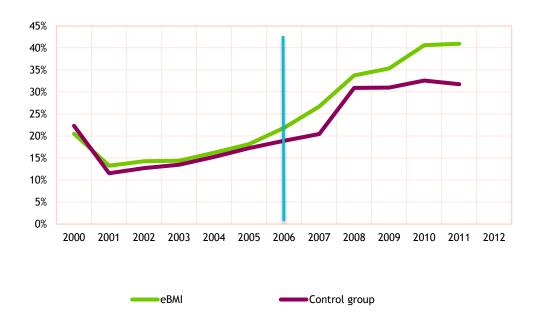


Figure 5.15: Trends in export intensity (exports as a percentage of sales)

Source: Based on ABSEI data

In fact, the full econometric/counterfactual analysis shows that there is no effect on export intensity (export as percentage of sales) due to participation in the eBMI. Again, eBMI does not show positive results in terms of export intensity even in interaction with other Internationalisation Support Programmes.

Productivity

When the evaluation was commissioned, eBMI was classified under the "Productivity" thematic area, probably due to the initial design of the programme.

Furthermore, the IMU stated in their official documentation that the aim of the programme was to increase ICT capabilities in order to increase SME competitiveness. However, when interviewed the same Unit, DAs, companies and consultants state that the scheme was focused on online marketing and internationalisation.

Given these conflicting messages regarding the main objective, it was decided to conduct an econometric analysis to estimate the effect of eBMI in productivity (measure as sales per employee) to discard or confirm the potential effect of the programme on productivity.

A positive effect of eBMI was found on productivity. Moreover, it was found that companies that have been part of eBMI have 7.7 percent higher productivity (significant at 95 percent confidence level) in comparison. Moreover, on average, every year after grant eBMI client companies had an annual productivity value that was higher in the order of €11,700 per employee in comparison with a control group).

However, the econometric analysis also revealed that the increase in productivity may have been at the expense of jobs. The analysis shows that the eBMI has had a positive effect on sales (of the order of 26 percent) but a negative impact on employment (10 percent decrease).

One potential explanation for the positive impact on productivity is that companies involved in eBMI make a higher use of ICT technologies (in comparison with other Enterprise Ireland companies) and this was a motivation to engage with the programme and keep on exploring further how to embed ICT into their process. This hypothesis is explored by looking at the percentage of sales and purchases made via the Internet by eBMI client companies and a control group. As Figure 5.16 and Figure 5.17 show, the gap between eBMI and non-eBMI companies regarding the use of these methods is quite remarkable. Unfortunately, these data were only collected in ABSEI until 2008, so this hypothesis cannot be fully tested.

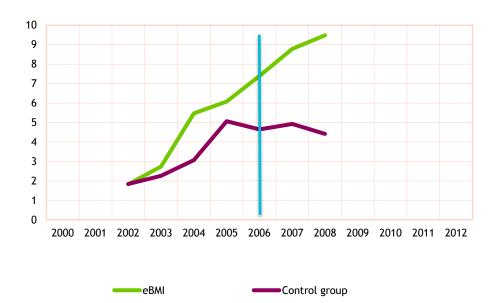


Figure 5.16: Percentage of purchases transacted via Internet

Source: Based on ABSEI data

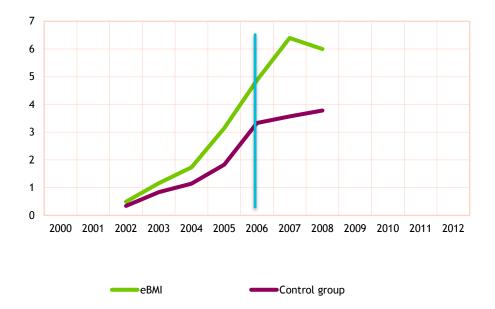


Figure 5.17 Percentage of sales transacted via Internet

Source: Based on ABSEI data

Conclusions and findings

Appropriateness

The literature suggests that the use of ICT and digital marketing could be powerful tools to increase internationalisation, especially among SMES who usually face resource constraints to overcome potential barriers to trade internationally. In this sense, the programme seems to be an appropriate mechanism to build capabilities among client companies when 'capability failures' exist, including managerial deficits, lack of technological understanding, learning ability or 'absorptive capacity' to make use of a new technology.

In that sense, the programme responded to companies' need to gain a better understanding of how digital marketing tools could help them to increase their presence in overseas markets. Furthermore, these tools and technologies were in many cases new to the company, who would not have engaged in these kinds of activities without the support of the programme, given not only lack of resources but also lack of awareness of the utility of digital marketing as a tool to expand their businesses.

According to the response from the survey, companies joined the programme with several objectives in mind, but mostly because they wanted to improve or increase their presence in overseas markets by improving their website or tailoring it to specific markets. This means that the programme (in its final arrangement) did address companies' needs.

Furthermore, according to the interviews with client companies and consultants, companies were in many cases not aware of the potential impact that the use of digital marketing tools and implementation of a digital marketing strategy could have on their company performance, and moreover on their efforts to expand beyond the national economy.

The design of the scheme seems to be an appropriate mechanism to increase awareness and understanding, so that the tools can be used in the future. This is because the scheme provided consultancy, advice and training.

However, the scheme did not offer resources for the implementation of the recommendations and advice made during the duration of the scheme, which means that in some cases some recommendations were not implemented, which in turn created mixed effects on final outcomes such as increased exports.

Programme effectiveness

The programme has had a moderate and mixed effect on increasing companies' digital marketing capabilities and on increasing companies' presence in overseas markets.

All the outcome indicators related to digital marketing have been only achieved or fully achieved by half of the companies or fewer. Success seems to be closely related to the ability of companies to invest further resources for the implementation of the advice and recommendations made by consultants, or even more, by the ability (and decision) to maintain a working relationship with consultants once the grant is over. In those cases, companies are very positive about the scheme and the effect it has had and would have in their business.

Since the grant has a training component, there seem to be wider lasting effects of the programme. Companies agree or strongly agree that the skills developed have been sustained (72 percent) or even expanded across other companies' activities (50 percent).

Regarding **internationalisation**, about half of the companies have developed their digital marketing activities with a focus on entering new markets. However, about two thirds state that they have entered a new overseas market as a consequence of the support provided by eBMI, indicating that the scheme may have had a positive impact on client companies' internationalisation.

In fact, companies that were part of eBMI show growth in exports two years after participation took place. However, the econometric/counterfactual analysis indicates that this growth cannot be attributed to participation in eBMI, and is most likely to be explained by an overall upward trend and/or by the effect of being part of other Enterprise Ireland business support programmes. Further testing was conducted to estimate whether results were being driven by a particular set of companies, but results remained unchanged when, for instance, manufacturing firms were excluded from the sample.

About two thirds of the companies' indicated in the self-assessment that their exports would have been lower in the absence of the support provided by the programme.

The self-assessment is consistent with the growth in exports for participant companies (shown by the statistical analysis) but inconsistent with the extent to which that growth could be attributable to the programme (shown by the counterfactual analysis). Unfortunately, there is no way to demonstrate with certainty which results are more accurate (self-assessment versus econometric analysis). However, the econometric analysis provides results based on approximately 400 companies over a period of 10 years, following a state of the art approach. Hence, more weight is given to the results arising from this analysis.

It is worth noting that the combined quantitative analysis indicates that eBMI (in combination with other business support programmes) have helped companies to increase their presence in overseas markets, but that contribution of eBMI to this achievement is not very strong, as other supports

seem to have the same effect on exports regardless of whether or not eBMI is included in the bundle of support received from Enterprise Ireland.

Similarly, companies that were part of eBMI increased their export intensity by 27 percentage points two years after participation took place. However, the econometric analysis also indicates that this growth cannot be attributed to the programme.

The econometric analysis shows that the programme has had an (unintended) effect on productivity. Companies that have been part in eBMI have 7.7 percent higher productivity in comparison with a scenario in which they did not take part in the programme (i.e. control group). Moreover, on average, every year after the approval of a grant that was eventually paid, eBMI client companies had an annual productivity value that was higher in the order of €11,700 per employee in comparison with a scenario in which companies did not get access to the support provided by eBMI (i.e. in a comparison with a control group).

However, the econometric analysis also revealed that the increase in productivity may have been at the expense of jobs. The analysis shows that the eBMI has had a positive effect on sales (of the order of 26 percent) but a negative impact on employment (10 percent decrease). This implies that companies involved have been able to increase their total sales, even if they had to lay off some personnel.

Recommendations

The programme has had a positive effect on companies' capabilities with regard to digital marketing, but has not had a clear effect on exports, which is the ultimate goal. Since the evaluation was completed, the eBMI programme has been replaced with the eMarketing Improvement Assignment programme. The findings of this evaluation were delivered to Enterprise Ireland over the course of the evaluation and the recommendations set out below were taken into consideration in the design of the new programme. A future ex-post evaluation should be undertaken (around 2017) of the eMarketing Improvement Assignment.

Programme design

Marketing and strategy - Enterprise Ireland already offers workshops related to overall marketing and strategy. Digital marketing is a component within an overall strategic vision and marketing strategy which needs to be defined in the first instance. DAs should make sure that client companies have that clear overall marketing strategy before joining schemes such as the eBMI that presuppose one is in place.

Overlap with other programmes - related to this, it is suggested that Enterprise Ireland make an assessment of the potential overlaps between a scheme such as eBMI and other business support programmes such as Going Global (which includes market research activities) or the Mentoring programme (which includes support for strategic thinking). Companies could participate in a scheme that only covers digital tools to implement already developed marketing and strategy plans.

Grant to implement follow-up activities - A scheme focused on building capabilities in digital marketing should include support for follow-up activities so the gains from the training and advice do not get lost or diluted. Creating a final additional phase for the grant for follow-up activities could help to increase the effectiveness of the scheme. This was also recommended in the evaluation of the eBMI's predecessor programme eBit in 2005.

Assessment of consultants - it is recommended recommend that Enterprise Ireland make a periodic assessment of the services offered by different consultants in order to identify whether they offer different levels of value to client companies.

Defining intervention logic models

Documentation on programme objectives - the main challenge of this evaluation has been to have a clear understanding on the objectives and focus of the programme and how they changed over time. This is mainly due to the fact that the evolution of the programme, from a focus on ICT capabilities to a focus on digital marketing strategy, has not been documented, and even late reviews of the programme (2010) still assessed it in relation to its original design. Written information on the objectives and characteristics of the programme (for its different iterations) could help to have more clarity on how it is being implemented and will also help future evaluations.

Establish target and metrics to assess success against metrics - The programme, and all Enterprise Ireland business supports, should consider setting targets not only in terms of grants allocated but also in terms of outputs and outcomes. This will permit to establish a set of metrics against which Enterprise Ireland can track progress and assess success.

Collecting data - collecting data at company level is crucial to track progress and success of the scheme. This is even more relevant when the population supported is small (as it is the case for eBMI) as exercises based on sample data mean that only a small number of companies are included in the analysis. In this sense, the current efforts made by the eMarketing team to collect information before and after participation are on the right track. It is also recommended to systematise data contained on the final reports made by companies, which include information on activities undertaken and number of staff trained.

Notes	