Realise your R&D ambition

Guidebook for Irish Medtech companies

Executive Summary

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Irish Medtech Skillnet

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Executive summary
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and the Irish Medtech Skillnet

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1. Foreword

Over the last few decades, Ireland has become a leading manufacturing and innovative hub for medtech. Its business-friendly environment and incentives for multinationals have created a very successful manufacturing environment, which accounts for almost a quarter of Ireland's economic output[1].

More than 40% of the global contact lenses, 80% of global cardiovascular stents and 75% of global orthopaedic knee products, amongst others, are manufactured in Ireland, whereas over 30 million diabetes patients rely on injectable devices made in Ireland. The sector employs over 40,000 people across 450 companies, making it one of the richest medtech ecosystems per population in the world. Of these companies, 60% are indigenous and 40% are Foreign Direct Investment (FDI) enterprises. The sector directly exports to over 100 countries with annual exports of €12.6 billion. As many as 9 of the world's top 10 medical technology companies have a base in Ireland, and many of its indigenous companies have secured significant financial investment, over €125m over the last 12 months, speaking to their calibre and ability to compete globally. In total over half a billion has been publically announced in terms of investment in the sector over the past 12 months.

Such success is, along with many other stakeholders across the ecosystem, attributed to the close collaboration between industry, stakeholders, and the Ibec group, the Irish Medtech Association, whose united vision and coordinated strategies have supported the transition of Ireland into one of the most recognised emerging hubs for the medtech sector. Together we are creating a new image of medtech in Ireland, one that is focused on high value.

The global medtech market is one of the most innovative sectors in Europe, with more than 13,ooo patents (8% of all patent applications) filed with the European Patent Office in 2017[2]. Medtech is expected to grow by 4.1% annually, reaching €477.5 billion by 2020. Ireland is a great location to welcome such growth and we need to continue working together in order to position Ireland as a mature, high value-added economy, with innovation at its core.

The challenge is to support the development of an innovative ecosystem that facilitates both the uptake of leading technologies in Ireland as well as provides commercialisation opportunities through its solid manufacturing base. R&D is a means for companies to innovate, to create new or improved products and processes, and to expand and renew their product portfolio. R&D has become more important in the previous decades as innovation cycles have shortened in many sectors, resulting in competition that is partly based on offering new (innovative) or better products and solutions.

[1] https://www.idaireland.com/invest-in-ireland

[2] The European Medical technology Industry in Figures (2019), Medtech Europe. For more information see: https://www.medtecheurope.org/wp-content/uploads/2019/04/The-European-Medical-Technology-Industry-in-figures-2019-2.pdf

In order to encourage R&D uptake, the Irish Medtech Association commissioned Technopolis Group, jointly funded by the Skillnet Ireland and Irish Medtech Skillnet develop a guide for medtech companies in Ireland.

Around 35 companies participated in a survey and in-depth interviews were conducted with a further 25+ senior managers with responsibility for R&D. The research was further enriched by three workshops, one held in Limerick and two in Dublin, which brought together 45 leading medtech companies from the FDI and indigenous community. The companies that participated represent over 30,000 people employed in the sector.

Based on lessons learned from successful site managers and R&D leaders, the guide provides instruction on how to secure and excel in global R&D from Ireland. The first 6 steps are directly relevant to both FDI and indigenous companies with the 7th step focused on navigating corporate structures, specifically.

This report is aimed at those who are interested in or willing to enhance their R&D practices and who want to be part of further developing a dynamic medtech industry in Ireland.

And through the provision of high-quality services to our member organisations, the Irish Medtech Association stands ready to help you as you navigate your way forward to ensure Ireland continues to be a global medtech hub.

Sinead Keogh
Director, Ibec Medtech & Engineering Sectors
and Director, Irish Medtech Association

2. Introduction

From an FDI perspective, many firms argue that it is only through R&D that the future of the site can be secured in Ireland. Not only transferring R&D to other regions is more burdensome than relocating manufacturing sites, but with a long-term R&D plan for medtech, manufacturing sites have the potential to increase their productivity, enter the commercial side of business and gain exposure and responsibility vis a vis headquarters. An IMA survey conducted in late 2017 showed that a third of multinational FDI companies claim their company has plans to introduce/expand commercial activity based out of Ireland, of those 9 in 10 companies claim there are initiatives underway to drive this objective.

A subsidiary which combines manufacturing with R&D is better positioned to contribute to a differentiation strategy (new products and services), and thus strengthen its strategic position with headquarters. It is important to stress that all strategies and actions, should always be for the overall benefit of the parent company, and the ability to collaborate and innovate across global R&D locations within a company is critical to successful innovation.

Investment in R&D is seen as a plausible solution to the innovation, competitiveness and sustainability of the firm, and medtech firms in Ireland have recognised this potential, with around 48% of companies surveyed having initiated R&D since 2000s. The survey also showed that the great majority of Irish companies/subsidiaries who took the survey (73.3%) have increased their R&D activity in the last five years and expect future R&D growth as well. Reasons behind such positive trends include expansion of the R&D unit in Ireland, investment in human resources, ambition of subsidiary leadership, as well as formulation of a long-term strategic plan.

R&D strategies are company specific and decisions for R&D location are dependent on various factors, such as corporate structure, nature of the desired R&D and structure, sector specific factors, etc. Subsidiaries are dependent on corporate decision-making processes and strategies which are not always straight forward and require specific attention and resources to master. Our 2019 survey among Irish medtech companies shows that although the majority of the companies have the ambition to conduct/increase R&D in Ireland, half of them do not have any concrete plans to do so. Such results indicates that more could be done to support companies to develop concrete plans to increase R&D in Ireland.

In order to fill this gap, the 7-step guide to realise your R&D ambition was developed. With this 7-step guide, we aim to address specifically the gap and provide support to Irish medtech subsidiaries to transform their R&D ambition into action.

The guide is based on lessons learned from successful site managers and R&D leaders across the FDI and indigenous community. It aims to support Irish medtech subsidiaries to transform their R&D ambition into action through **7-step process**.

Directed towards firms who are interested in or willing to enhance their R&D practices, it provides guidance and lessons learned from successful firms on how site managers or R&D leaders can effectively acquire, secure and excel in global R&D from Ireland. Steps 1-6 are relevant to both the FDI and indigenous community with Step 7 directly relevant to FDI companies. The seven steps include:

1. Express ambition, leadership skills and vision
2. Translate your vision into a plan
3. Form a winning team
4. Develop R&D capacity
5. Build Track and reputation
6. Identify your value proposition and pitch
7. Navigate and connect with corporate structures

Each step is accompanied by a description, list of actions and quotes from successful firms. A check list is presented at the end to assure the monitoring of steps and progress.

The 7 Step guide was made possible through research conducted by Technopolis Group in 2019. This research included a survey of medtech companies in Ireland as well as more than +25 interviews with leading medtech companies, representing more than 30,000 employees in the sector in Ireland. Last but not least, the 7 steps were developed and validated during three half day workshops which brought together around 45 medtech R&D and site managers

3. The importance of R&D for the medtech sector - research summary

3.1 R&D benefits: Why should subsidiaries conduct/increase R&D in Ireland?

R&D is an important part of corporate strategy for medtech companies due to its innovative powers and ability to develop new products and processes which can address current and future market needs. In a competitive market, new products and processes can drastically change the position of a company vis a vis; its peers. R&D is crucial for business sustainability especially for high-tech manufacturing companies where often competition on technical capabilities and quality of products comes before costs.

The literature[3] documents the importance of positive relationships and R&D to business performance.

Through R&D, companies can:

- diversify their product portfolio and differentiate from competitors;
- optimise their processes and thus improve their operational performance and efficiency of manufacturing;
- increases profitability and contribute to their long-term growth;
- enter new markets or increase their market value through the development of patents, an important strategic asset which can also lead to additional streams of income through licensing. To some extent patents can also help protect a company's market position.

Moreover, R&D is inherently strategic, it requires well-trained professionals, infrastructure and is often embedded in a local ecosystem. In that respect, adding an R&D arm to manufacturing creates new career paths for employees while it can make your company more attractive towards high-skilled individuals, such as engineers with experience on product development and production processes. In turn, strong engineering capabilities can strengthen the manufacturing position and production capability of subsidiary firms. Subsidiaries with experience in setting up new production lines and R&D processes have an advantage when it comes to acquiring the production of a new product. Co-locating R&D and production is therefore a strategic choice.

In our 2019 survey among Irish medtech companies, the majority of companies indicated that they have the ambition to conduct/increase R&D in Ireland. Around half of them however, indicated that no concrete plans have been developed yet to increase R&D activity in Ireland. Overall, such results indicate that more could be done to support companies develop firm plans to increase R&D in Ireland.

[3] Overviews of these effects are documented in, for instance: (1) Bing Guo, Jung Wang and Steven X. Wei (2018). R&D spending, strategic position and firm performance. Frontiers of Business Research in China. (2) Bart Beld (2014). The effects of R&D investment of firm performance. 4th IBA Bachelor Thesis Conference, November 6th, 2014, Enschede, The Netherlands. (3) Inge Kerssens-van Drongelen, Bill Nixon and Alan Pearson (2000). Performance measurement in industrial R&D. International Journal of Management Review.

Does your company/subsidiary have the ambition to conduct/increase R&D in Ireland?

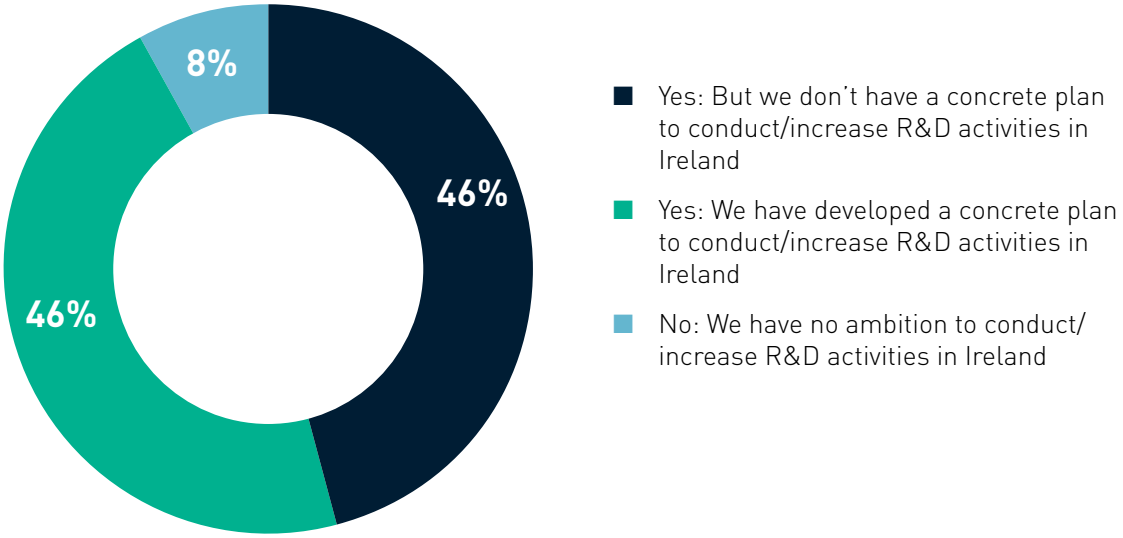


Figure 1 Plans to conduct R&D in Ireland: survey question "Does your company/subsidiary have the ambition to conduct/increase R&D in Ireland" (N=35). Technopolis Group. (2019). Survey on increasing the R&D intensity in the Irish medtech sector.

3.2 R&D location factors

The reasons why firms expand their R&D activities in their homeland or abroad can be grouped in various factors[4]:

- **Nature of the desired R&D**; In order to make a decision where to locate certain R&D activities, companies may distinguish between R and D. Whereas Research (R) aims to create new knowledge, Development (D) uses existing knowledge gained from research and/or practical experience, in order to create innovations in processes, products, devices and/or services. 'R' location factors may be driven by access to scientific knowledge and expertise, access to talented researchers, opportunities for research collaboration with universities, research institutes, specialized suppliers and others and proximity to (central) strategy formulation. The location factors for 'D', on the other hand, are more related to access to markets, proximity to partners in the supply chain, proximity to main customers and proximity to manufacturing sites, in order to help the company to adapt its products and services to local requirements more effectively. (R) therefore, may take place at one of a few central facilities (which tend to be 'sticky' and costly to relocate). Application development processes (D) often occur more integrated with production / manufacturing sites and the (R&D) network of customers. Hence, 'D' tends to be dispersed across various markets (countries) in which the company operates.

[4] e.g. (Moncada-Paternò-Castello, 2011) (Verbeek, 2014) (Guimón, 2008) (Deuten, 2015) (Regeczi, 2016) (Economist Intelligence Unit, 2004)

- **Industry sector specific factors**; Industry specific factors relating to the nature of the products or services or related to geographical conditions or to political, cultural or social views in a certain region or country, may also influence the location decision for R&D. For instance, R&D in pharma or medtech often requires clinical research.
- **Mode of investment**; The mode of investment, i.e. whether a R&D investment occurs via greenfield investment, an expansion of an existing subsidiary or via a (transnational) merger and acquisition (M&A) may also influence the location decision.
- **Pathway dependencies (History of R&D organisation)**; A centralized versus a decentralized R&D structure within a company will also have an effect on successive R&D location decisions. At least four different R&D structures can be distinguished:
    - **Centre of excellence structure**: there is one laboratory with a global mandate;
    - **Supported specialization structure**: main activities take place at one location, supported by a number of small units elsewhere;
    - **Network structure**: there is a network of dispersed laboratories with their own activities;
    - **Specialized contributors' structure**: each unit is specialized in a few disciplines.

A decision on the location of R&D activities is thus driven by the interplay of various factors. When looking at this from the perspective of a subsidiary wanting to assess the changes to attract (more) R&D a classification in three groups is important:

- subsidiary potential;
- parent company strategies, and
- host country characteristics.

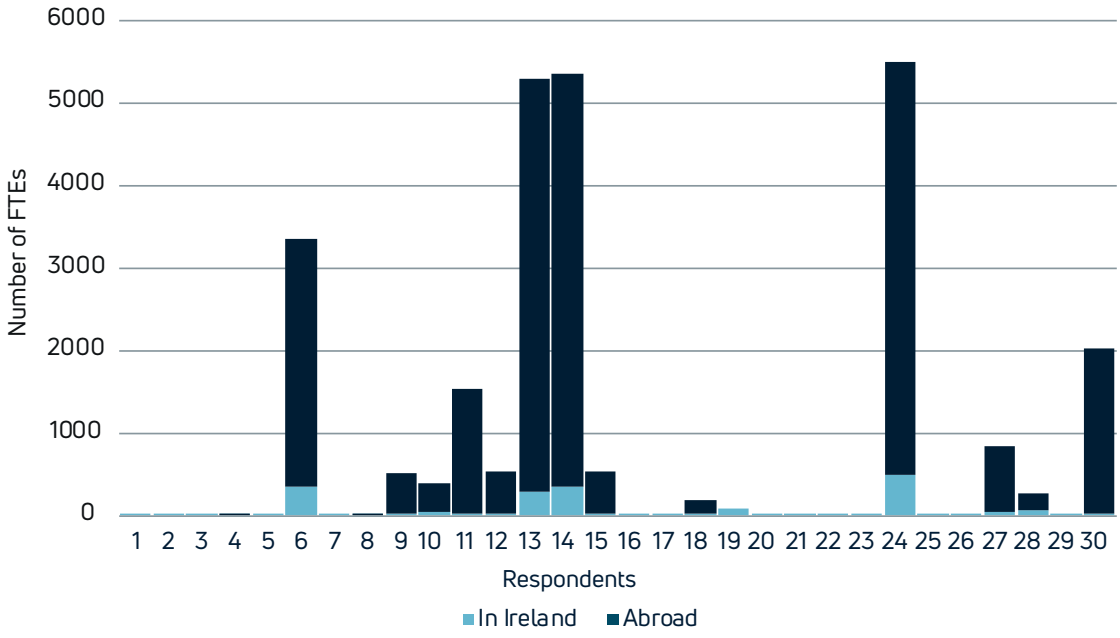


Figure 2 Number of FTEs involved in R&D activities in Ireland and abroad (N=30). Technopolis Group. (2019). Survey on increasing the R&D intensity in the Irish medtech sector.

Figure 2 shows that the number of Full Time Equilivents (FTEs) involved in R&D activities at the Irish subsidiaries abroad is much higher than in Ireland. On average, the companies that conduct R&D activities in Ireland involve 70 FTEs in R&D activities in the Irish company/subsidiary and 1227 FTEs abroad. The average share of R&D staff of indigenous companies is 57.1% of the total number of employees in Ireland, while the share of R&D staff in the subsidiary companies is only 12% of the total number of employees in Ireland. This indicates that indigenous enterprises invest more human resources for R&D in Ireland in relation to all their activities, while R&D activities of subsidiary companies in Ireland represent a significantly smaller part of the total number of activities that they conduct in the country. Possibly, this could be attributed to the early stage of development of indigenous companies if compared to production activities of multinational enterprises. This also shows the huge opportunity to attract more R&D into Irish companies/subsidiaries.

On average, the greatest share of the R&D budget is spent on demonstration and pilots and on pre-commercial deployment (37.8% and 35.2% respectively). The smaller share of the R&D budget, on average, is devoted to applied research and development (24.5%) and to idea through proof of concept (14.9%).

In the last five years, R&D activity has increased for most Irish subsidiaries who participated in the survey (73.3%). For 20% of respondents' companies the R&D activities have been stable, whereas only 6.7% acknowledged a decrease.

When looking at the future five-year forecast, the great majority of respondents (74.1%) expect the R&D activities in their Irish company/subsidiary to increase, and 18.5% assume it to be stable. No survey respondents expect a decrease in R&D in their Irish company/subsidiary in the next five years. However, it must be noted that some (7.4%) do not know if it will increase or decrease. In addition, 18 out of 21 respondents that indicated that the level of R&D in the last five years increased and expect that in the next five years their company will continue increasing the intensity of R&D activities. Such results reflect a positive trend in most companies according to respondents.

When looking at the start year of R&D activity in Ireland, most surveyed companies (17) launched their R&D activities between 2010 and 2018, whereas eight of them had done so before 2010 and five before 2000. According to this small sample, a positive trend is observed in number of companies starting R&D activities in Ireland in the last decade.

The survey shows that respondents are satisfied with most external location factors for R&D in Ireland: especially the current political/macroeconomic environment, market access, human resources/skills available, public incentives/support for R&D and tax regime in the country.

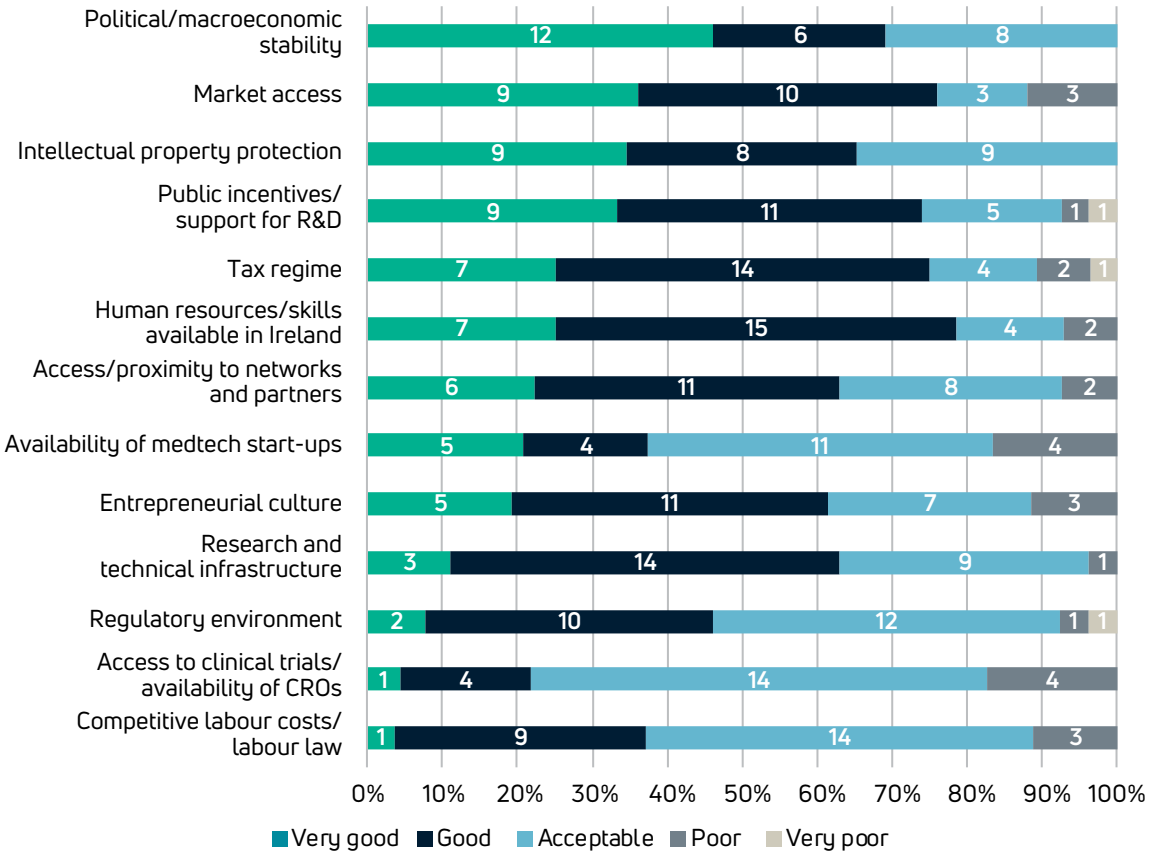


Figure 3 Rating of location factors for doing medtech R&D in Ireland (N=28). Technopolis Group. (2019). Survey on increasing the R&D intensity in the Irish medtech sector.

Labour laws and labour costs, access to clinical trials, regulatory environment and start-up environment can however be improved. The Irish Medtech Association and Ibec will continue to lobby Government in this regard to ensure Ireland has the right policies and conditions to help both indigenous and FDI companies thrive here. Moreover, with a population of less than 5 million, Ireland has a very small customer base for medtech products, and the industry is therefore heavily dependent on external markets. Ireland exports in excess of 95% of what is produced, directly to over 100 countries.

Investment in R&D is seen as a plausible solution to the innovation, competitiveness and sustainability of the firm.

Those respondents that already conduct R&D in Ireland were asked to select the main internal factors that allow them to increase R&D in Ireland. They responded that quality and size of R&D staff/activities that are conducted at the subsidiary is the most important factor that allows subsidiary management to affect the decisions at company headquarters. Hence, one could say that the scale of existing R&D activities and the competencies of staff are directly related to the ability of the subsidiary management to increase R&D in Ireland. This, however, also reveals that companies with smaller R&D capacity and staff could face more challenges in attracting (additional) R&D activities in Ireland.

4. A summary of the 7 Step guide to realising your R&D ambition

Directed towards firms who are interested in or willing to enhance their R&D practices, it provides guidance and lessons learned from successful firms on how site managers or R&D leaders can effectively build, acquire or secure, and excel in global R&D from Ireland. The first 6 steps are relevant to both indigenous and FDI firms while the seventh step is directly relevant to FDI companies. In the full extended report, each step is accompanied by a description, list of actions and quotes from successful firms. In the attached, a summary of the checklist is presented at the end of each step which will enable the monitoring of progress. Each step has a set of high-level recommendations for the Irish Medtech Association, captured in the extended report.

7 Steps to Increase R&D for Medtech companies in Ireland

1 Express Ambition Leadership & Vision

The starting point for all change is the desire to change

Be explicit in your persuit of R&D. Develop a vision that is consistently pursued and carried out in Ireland.

2 Translate your Vision into a Plan

Adding an R&D arm to manufacturing is possible

R&D growth can take many different forms and depends on the size, track and position of your company in the market.

4 Develop R&D Capacity

Create unique products that could make you stand out

Involve customers/clients in the R&D process to develop highly demanded, relevant and novel solutions.

5 Build Reputation & Track

Start small, think big!

Pursue R&D if the product/process enhancement is in the overall interest of your company and show that you are the right site to do it.

3 Form a Winning Team

Right mix of skills and expertise

Hire engineering staff with R&D ambition, ability to think strategically and who can communicate effectively. Establish links with sales and marketing.

6 Identify your value proposition and pitch

Pitch perfect

Develop a strong business case which shows your ability to conduct R&D and potential to provide a positive ROI.

7 Navigate Corporate Structures

Build positive corporate relationships

A good visibility for your subsidiary's successes is important for getting entrusted with R&D projects.

Step 1: Express Ambition, Leadership & Vision

The starting point of all change is the desire to change. No firm has ever changed their R&D structure and capacity without at least some leaders having the ambition for it to change first.

"Always work with marketing to figure out your strategic plan, even if this is for the short term. Marketing often operates around a 2 year forecast but by building a relationship with the marketing team you can work together towards a more long-term vision."

Explicitly Pursue R&D Be explicit about your goals and consistent in their pursuit.	**Risks taking attitude and action** Take reasonable risks to realise cultural company change.	**Create links with marketing** Work with marketing to create your strategic plan.	**Choose corporate goals first** Enhance products or processes that bring an added value and increase the competitiveness of the whole firm.
Don't do it alone Ambition and cultural change can only be achieved collectively. Create a team who can follow the vision with trust, conviction and creativity.		**Pitch yourself as high value** Focus on your added value, experience and reputation.	

Chart 1.1: Six key principles of a successful approach to express ambition, leadership and vision.

Checklist summary

- Formulate ambition and assemble a team that shares this ambition;
- Understand corporate strategy and vision and make a clear call to action;
- Understand customer needs and connect with marketing team;
- Identify added value of your site;
- Identify key internal or external decision makers at corporate level;
- Appoint team member(s) in charge of the strategy management, communication and corporate relations;
- Engage with key decision makers on a regular basis, including frequent travel to HQ;
- Understand reasonable risk taking and decision-making strategies;
- Understand the market in terms of new technology, market/user trends, and digital transformation.

Step 2: Translate your vision into a plan

If you are a site manager with an ambition to enhance your R&D capacity, then the first step towards realisation is having a medium-to long term plan (accompanied by short term goals). Developing local R&D is not an overnight event. The plan should include all steps needed for you to grow R&D capacity, but it should also be short and flexible so it can be refined and evolved over time. Present your plan at every opportunity to encourage motivation and get feedback on goals and priorities.

"There is a possibility for an evolution: where original mandate was manufacturing, it can develop into process and equipment development, and then, maybe in time, product development. R&D is important but also R&D can be moved around. You need to be present in the strategy for your business and influencing the strategy for your product line so you can dictate where the research will be done, who will be doing it etc."

Think big, start small	**Allocate time and resources**	**Keep it short & flexible**	**Develop R&D capacity**
Building track and reputation (from manufacturing to process/ equipment development, to product development.)	Going outside business as usual can be expensive. Make sure you allocate enough (human) resources.	Plan carefully but allow flexibility in order to grasp (sudden) opportunities.	Internally by hiring T-shaped engineers or externally through acquisitions.

Chart 2.1: Four key principles of a successful approach to translating your vision into a plan

Checklist summary

- Make R&D very explicit in your ambition and build a long-term plan;
- Link company's overall strategy to your site's growth;
- Identify concrete market opportunities;
- Gather insights from sales and marketing department at your organisation – as they have most insights into the market;
- Generate concrete plan that articulates reasons why R&D should be started/expanded in your location and delineate action points on how to achieve that;
- Grow competency and add resources in small increments and use the experience to grow skills and capabilities;
- Hire multidisciplinary staff that shares R&D vision and ambition and who have capacities to execute it;
- Ensure team is visible and talent is recognized by corporate.

Step 3: Form a winning team

A strong local team is an essential resource for companies that want to attract and develop R&D activities. It affects both scaling up and diversifying company activities. Below are displayed building blocks to ensure you have an excellent team.

"Our company works a lot with universities and tries to identify talent. Later, we pair talent up with experienced people to train them well. We understand that employees do not stay forever in the company, therefore we try to cater for people to ensure that they stay longer."

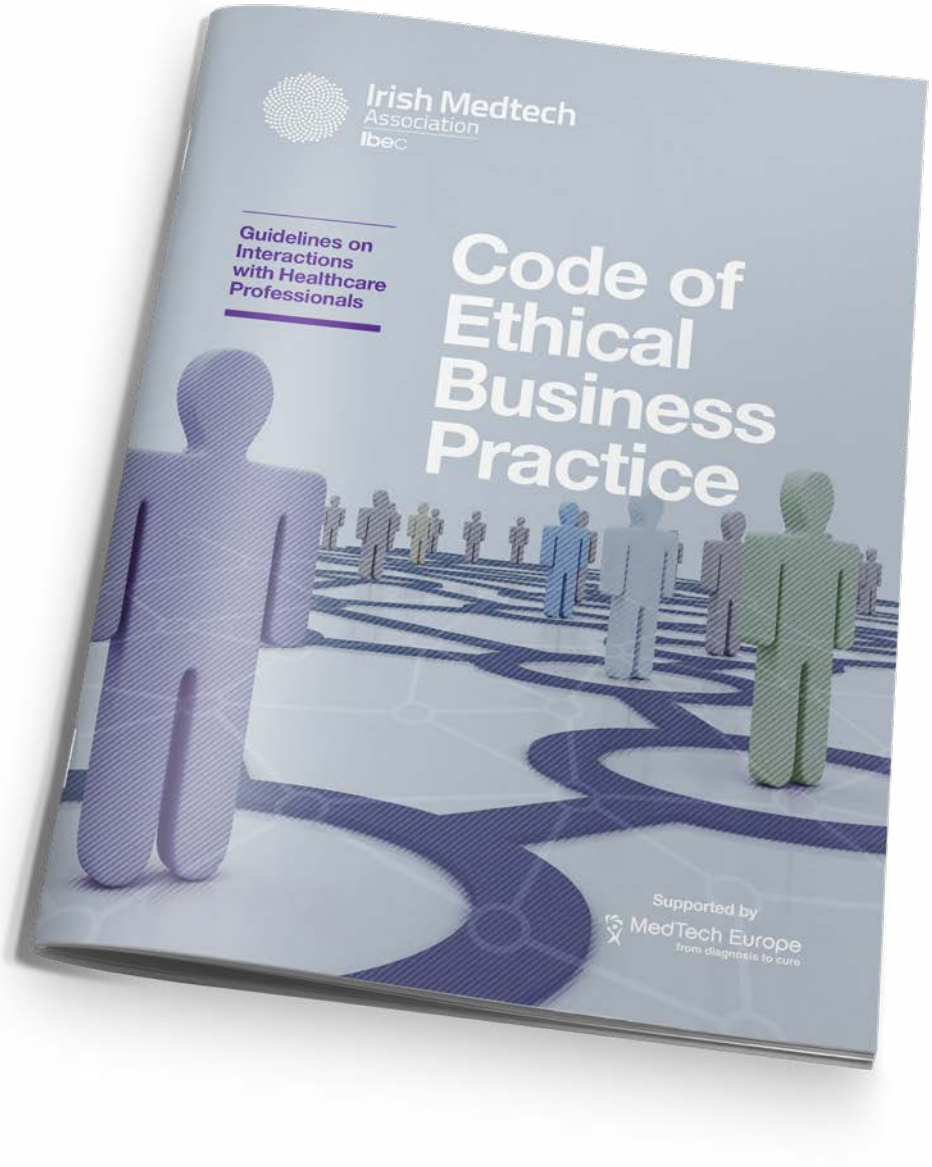
Assess available human resources Check what human resources are available and what are needed to conduct/expand R&D activities. Make sure that your team has diverse skills and expertise.	**Train or hunt for R&D: address the skills gap** Design and implement a human resource strategy to address skills gaps in your company for increasing R&D intensity – either through upskilling of personnel or through hiring new employees.	**Make people happy and curious** Use methods to retain available human resources and cultivate a culture of learning and professional development in your company.
Stimulate creation of new ideas Provide opportunities for team members to develop new business ideas – support learning, knowledge sharing and collaboration.	**Build a strong marketing team** The marketing team is critical for making portfolio and R&D decisions. Connect the marketing team with your clients (e.g. doctors, hospitals) to build relations and to understand the market better.	

Chart 3.1: Five key principles of a successful approach to forming a winning team.

Checklist summary

- Develop a human resource strategy in line with R&D plans;
- Assess skill gaps across company departments/units;
- Hire or/and build needed skills/competencies and monitor development of the skillsets;
- Support collaboration among different departments/units to co-create R&D ideas;
- Develop methods to retain available human resources;
- Stimulate creation of new ideas, culture of life-long learning;

- Continue looking for talented people and investing in skills development;
- Adjust human resource strategy to changes in the business strategy.
- Ensure you team is aware and are abiding to the Irish Medtech Association (IMA)'s Code of Ethical Business for the Irish medical technology industry. The code is comprehensive in its commitment to high ethical standards. It governs all interactions between medical technology companies and healthcare professionals, and it is supplemented by detailed guidelines which clarify and distinguish between appropriate and inappropriate activity. for more information on the Code, visit: **www.irishmedtechassoc.ie/ethics**



Step 4: Develop R&D capacity

The building-up of R&D capacity should be guided by the overall strategy on R&D that specifies:

- What capacities should be developed for implementation of R&D activities;
- How much human, financial, technical and other resources should be invested/accumulated;
- How the process of capacity building should be implemented;
- What R&D results/impacts are expected;
- How the monitoring and evaluation process on development of R&D capacities should be conducted.

"We validate ideas at an early stage by doing user-focused research as part of R&D. It involves interviews and market analysis to get insights, create ideas and to think about the design of new products. Best ideas are refined and then the work on product development starts. Doing such research also helps to improve existing products through feedback. Hence, it is easy to justify to the headquarters why we are doing this."

Build on company strengths Develop new R&D activities based on what your company is good at - expertise, resources, competencies. Use other resources that a company has accumulated - partners, customers, knowledge/information.	**Start small, think far!** Introduce small R&D projects/activities as part of normal business processes. Account for risks, build new competencies and capacities gradually. Develop a long-term strategy to make R&D a part of core business. Show reasonable approach to risks.
Remember "United we stand, divided we fall!" Explore partnerships with research and commercial organisations to gain access to external resources and new ideas. Share and gain ideas through networking.	**Hunt for opportunities and support** Know your market and R&D ecosystem to identify business opportunities and to test ideas. Explore what support and funding opportunities are available at governmental, financial and partner organisations. Look for buddy schemes, mentorship programmes for R&D staff, business executives.

Chart 4.1: Four key principles of a successful approach to forming a winning team.

Checklist summary

- Identify company strengths on which you can build R&D and develop capacities;
- Get to know your market to check if you have a potentially successful idea;
- Consider how you can involve customers/clients into the R&D process;

- Map possible R&D partners, attend events where you can meet partners and develop proposals;
- Explore available support at governmental, financial and partner organisations;
- Look for mentorship, buddy programmes for business executives and R&D staff;
- Develop an R&D strategy, align it with the long-term business strategy;
- Explore what start-ups have interesting business ideas and could be suitable business partners;
- Design small R&D projects and a plan for implementation.

Step 5: Build track record and reputation

Reputation is key for building relationships with customers and partners. As any other essential element of a company, the company management should design a strategy on how to achieve a desirable reputation. Below are presented four core principles of an effective strategy:

"Prove that your company can deliver and get all the targets, build trust! Praise your team inside and outside the company. Build the image that Ireland is a good place for doing R&D, tell success stories and market the ecosystem."

Build on good reputation Link current R&D activities to what your company is already good at (e.g. your track record in manufacturing).	**Train or hunt for R&D: address the skills gap** Build closer personal relations with the management team. Present your company and its new R&D activities/plans. Show how R&D activities are to the benefit of the entire company.
Invest in maintaining a good reputation Ensure that company success is known Continue investing in R&D, in company image at headquarters and on the market.	**Be closer to the market** Involve customers, other med-tech stakeholders (e.g. researchers, doctors, hospitals) while developing R&D products. Encourage R&D staff to attend business events, to write research publications for re-branding the company. Ensure that your company is visible in main med-tech R&D events, forums.

Chart 5.1: Four key principles of a successful approach to building track record and reputation.

Checklist summary

- Exploit good reputation in core activities to justify R&D activities for headquarter management, bearing in mind that all strategies and actions should always be for the overall benefit of the parent company;

- Market company successes in core activities (e.g. manufacturing) during meetings, events and other forums;
- Communicate success in R&D activities to internal and external stakeholders;
- Develop a strategy and skillset on internal marketing and external branding;
- Build trustworthy relations with existing clients, partners and the headquarter management;
- Invest in re-branding of your company and in maintaining a good reputation.

Step 6: Identify your value proposition & pitch

The previous steps have contributed to internally marketing your subsidiary as a trustworthy, successful and capable location to perform specific R&D projects (i.e. reputation building). Selling is however more than that: it is about providing a good business case with a value proposition. This value proposition is the basis of a pitch that one should have readily available to communicate when the right circumstances arise.

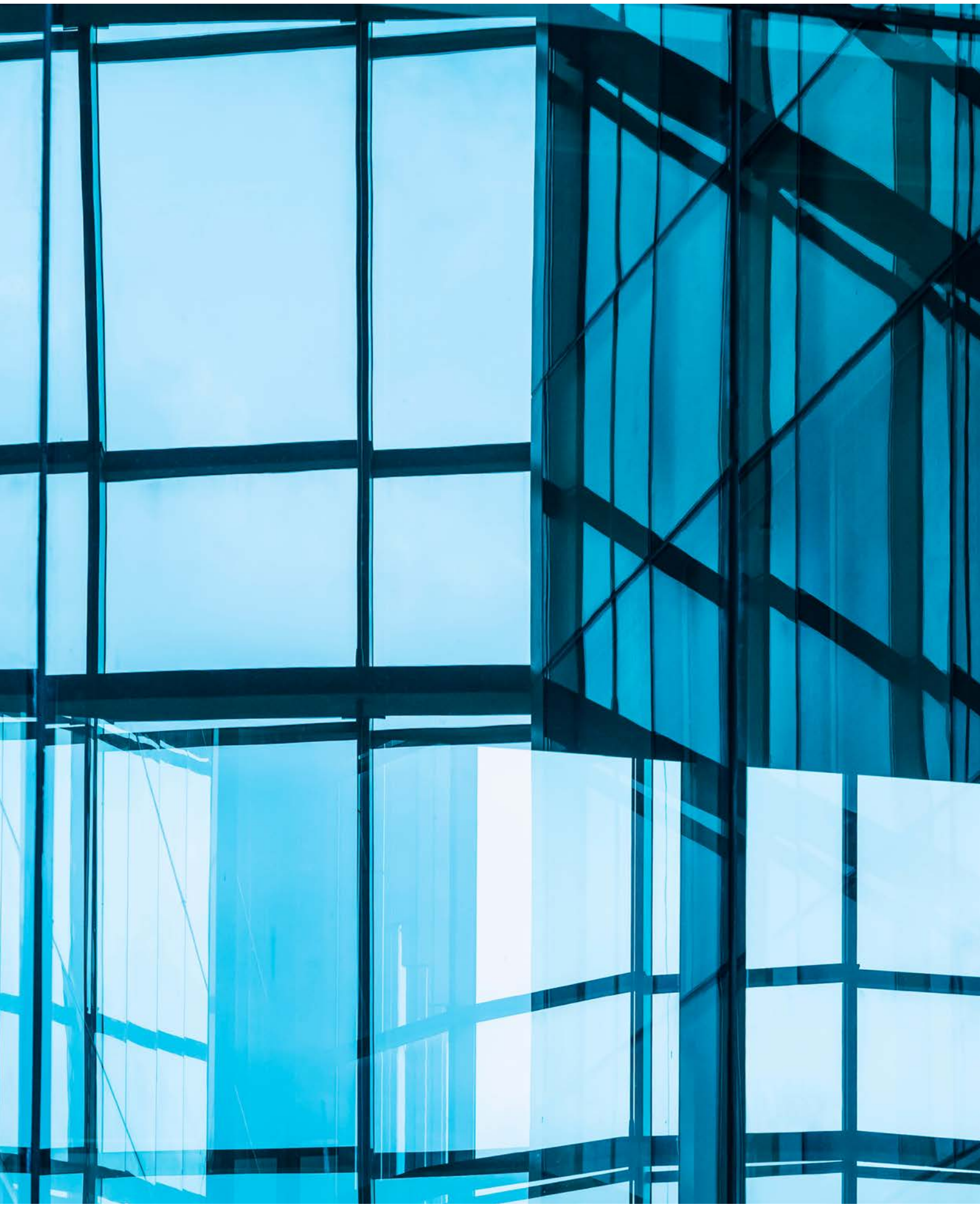
"Track, value and reputation will mostly win discussions over costs. Pitch for instance that you can deliver more value for the same costs than other subsidiaries. Think about the packaging of your pitch."

Develop a strong business case for an R&D project Pull all business arguments together, including business track record and team. Make your subsidary stand -out against others. Develop a strong and communicative value proposition in your business case.	**Direct your value proposition at strategic goals, ambitions and needs of HQ/VP R&D** It is important to get insights into the needs or specific agendas of responsible C-level executives to have your business case well-received. This may include market needs.	**Pitch yourself as high value, not as low-cost (or as both)** Show that you can provide more value than other subsidiaries, if possible as well at lower costs. In R&D high-value often wins over low-cost alone.	**Always have an R&D pitch ready that contains the main message of your business case – your value proposition** Most importantly: pitch at the right time.

Chart 6.1: Four key principles of a successful approach to identifying your value proposition and pitch.

Checklist summary

- Create ideas for concrete R&D projects based on perceived market needs or connected to business opportunities at your Irish subsidiary;
- Develop a good relationship with the marketing and sales functions or exchange key personnel in global roles in order to get good insights into market needs and business opportunities, which may spark new ideas for R&D;



- Get direct market and competitor insights by attending conferences, building a network of Key Opinion Leaders, visit hospitals and potential clients/users to understand their needs and to learn how your product could improve or evolve;
- Develop general arguments for doing R&D at your Irish subsidiary that can be put in a business case once opportunities arise;
- Study R&D opportunities and develop specific arguments why your Irish subsidiary would be best positioned to do this R&D project;
- Develop a business case for a specific R&D opportunities at your Irish subsidiary with clear strategic and financial arguments, ready to share at the right moment. Focus on high value first;
- Prepare a convincing pitch for the business case and be ready to pitch at the right time (when HQ is open for new R&D investments and you are in the right setting with the VP of R&D);
- Build a network of R&D partners that could improve your access to R&D knowledge and skills and could contribute to strengthening your business case for R&D at your location in collaboration with existing partners;
- Scout innovations and R&D opportunities in the Irish and EU medtech sector that could result in proposals for collaborative R&D, publicly co-funded R&D or acquisition of R&D focused start-ups;
- Do training on internal pitching of R&D projects or on developing business cases for R&D projects in order to get experience in the specifics for R&D.

Step 7: Navigate and connect with corporate structures

The six steps so far are to a large extent applicable to SMEs and start-ups as well. These organisations deal with similar issues in increasing their R&D intensity as multinationals, although their actions and perspective are generally more externally oriented (because there is no internal decision-making unit outside Ireland, and no internal financial contributor). However, this seventh step only applies to Foreign Direct Investment companies, as in SMEs and start-ups there is no complex corporate structure to navigate. Navigating and connecting with corporate structures is an activity that should be undertaken.

"Business justification needs to be supported at the right time and at the corporate level. Is the company in growth or retraction phase? Is there a change of leadership? Is there movement in the corporate world? Answers to these questions can impact your project and R&D ambition."

As each multinational has its own culture, structure and procedures, navigating corporate structures is highly dependent on your organisation. Still, some general approaches can be distilled and are identified as follows:

1. know and understand your corporate's structure and politics;
2. build trust and good relations with key corporate decision makers;
3. be visible and build a good reputation for your subsidiary.

5. High level recommendations and next steps

In total, 31 recommendations were identified for the Irish Medtech Association which includes organisation of peer to peer learning groups to exchange lessons, experiences and best practices on how to increase R&D in medtech FDI companies and indigenous companies in Ireland utilising the 7 steps as a framework.

The Irish Medtech Association will roll out training and workshops over the remainder of 2019 and 2020 to help companies realise and reach their potential across the seven steps.

The full report is available on request, please email **sinead.keogh@ibec.ie**

Irish Medtech Association
Ibec

The Irish Medtech Association is part of Ibec, the largest employer representative group in Ireland. IMA's vision to 2020 is that Ireland will be a global leader in innovative patient-centred medical technology developments, products and solutions.

- Ireland will be a globally significant medical technology hub and the location of choice for the industry due to our expertise and pro-business environment.
- Irish medical technology developments, products and solutions will be major contributors to global healthcare and the global economy

The Association has over 200 members, representing over 90% of employment in the sector.

www.irishmedtechassoc.ie

The Irish Medtech Association (IMA)'s Code of Ethical Business for the Irish medical technology industry is comprehensive in its commitment to high ethical standards.

It governs all interactions between medical technology companies and healthcare professionals and it is supplemented by detailed guidelines which clarify and distinguish between appropriate and inappropriate activity in areas such as:

- Appropriate support of scientific and educational conferences
- Legitimate consulting agreements with HCPs
- Provision of educational grants and charitable donations
- Provision of modest hospitality and gifts

For more information on the Code, visit: **www.irishmedtechassoc.ie/ethics**

Irish Medtech Skillnet

Working in partnership with Skillnet Ireland and our contracting organisation, the Irish Medtech Association (Ibec sector), the Irish Medtech Skillnet has over the past number of years grown substantially in direct response to the training needs of industry. Total expenditure (2008 - 2017) is over Đ6.3 million with 42% contribution from member companies and the remaining 58% funded by the state. Targets of over 8,900 trainees and 46,000 training days have been achieved.

www.irishmedtechskillnet.ie

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