



Future of manufacturing Khar & Partners – Value chain case study

Born globals and their value chains

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1. General identification of the born global enterprise and the global value chain members

1.1. Description of the born global enterprise: Khar & Partners

Khar & Partners is a micro enterprise based in Sibiu, Romania, that conducts research and development (R&D) in engineering and biology¹. The start-up was established in October 2013 by Khaled Al Mezayen and Pierre Huet, who are the two directors and co-owners (shareholders in the proportion of 60% and 40% respectively) of the public limited company entity with equity capital of €100.000.

The two co-founders decided to develop water supply systems due to their previous personal or professional experience. Both used to work together in France: Mr Huet used to be Mr Al Mezayen's supervisor in their work as consultants for food supplement projects. Mr Huet was also part of the Doctors without Borders organisation, and carried out many assignments in water-deprived communities in Cambodia. He realised the importance of water provision from such assignments, especially having witnessed a cholera outbreak due to the lack of clean water. Mr Al Mezayen, on the other hand, has origins both in Romania and Syria, two countries with clean water supply shortages: in Syria, clean water is vital especially in refugee camps, while in Romania one in two people, according to him, do not have access to potable water.

The company initially started with only the two co-founders, and later added staff depending on the market demand for their first product, SOWAT. At the time of writing, the firm has seven employees, along with an international scientific committee of five members. The committee was established based on the previous professional network of the two founders, mainly to help them better develop the envisaged product range from a technical point of view. The committee consists of the two founders, two academics and an international consultant (the committee's role is described in section 3.2). The employees are all Romanian, six male and one female, and most of them have a background in biochemical sciences. The firm has an office in Sibiu, along with a research facility in Cristian, a commune at the outskirts of Sibiu.

Khar & Partners is the largest R&D firm in Romania in terms of yearly turnover, according to firm directory ListaFirme.Ro, and develops three products: SOWAT (water filtration system), SORAYA (hydroponic farms growing fodder) and GLADIATOR 4G (horse food supplement). At the time of writing, SOWAT is the only product already in commercial phase, while the two others are still under development. The products are interrelated, complementary and allow for synergies from a scientific development point of view.

Khar & Partners first started developing SORAYA, and in the process had to devise a way of supplying purified, potable water for its wheat grass-growing fodder. This resulted in the development of the SOWAT system, which is used in the process and has also become a stand-alone product. GLADIATOR 4G uses dry wheat grass from SORAYA, in combination with pollen extract to complement the nutrition of horses used for labour. The overarching link among the products relates to the ambition to rely as much as possible on natural inputs, and to have a near-total control of the development process (reduced reliance on external consumables).

SOWAT, acronym for System Open Water Advanced Technology, is a water filtration system that can filter water from any natural source to produce drinking water for 500 to 5,000 people. In doing so, SOWAT relies on a four-step filtration process that removes micro-particles, bacteria and even all viruses from contaminated water, according to its designer.

SOWAT is a product designed for use in areas deprived of drinking water, particularly in developing countries and in conflict zones. Its main clients are local/regional authorities, but also humanitarian NGOs. Its technical specifications allow it to function with little maintenance, reduced energy

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¹ NACE Code M72 – Scientific research and development.

consumption and a plug-and-play installation mode to fit the needs of its envisaged deployment areas. The product dimensions enable it to be transported easily via forklift, having the size of a standard Euro-pallet.

SOWAT is the result of the cooperation between Khar & Partners, which designed it, and ENERGOM, a French-owned manufacturer based in Cluj-Napoca, Romania, which produces it. Its design and distribution, however, also rely on a number of international partners, such as Pipeco Group (suppliers of water tanks), or ProEdge (distributor of SOWAT in India). Although other stakeholders have been involved in the process of designing SOWAT and bringing it to market, this case study focuses on these four international actors, while briefly mentioning other relevant ones where necessary.

1.2. Description of global value chain member 1: ENERGOM

ENERGOM is a SME based in Cluj-Napoca, Romania, operating in the manufacturing sector². Established in 2002, ENERGOM is a wholly-owned subsidiary of the French group 'Gonzalez'. Although fully-owned by Gonzalez, ENERGOM is rather autonomous in its business decisions and in managing its own clients and subcontractors. The Gonzalez group is composed of firms operating in different but complementary sectors, and ENERGOM sometimes produces equipment for firms within the Gonzalez group.

The company had a turnover of €10.5 million in 2016, and 130 employees in 2017 (the number of employees grew by 30% between 2015 and 2016). ENERGOM specialises in the manufacturing of electrical panels and electro-mechanical equipment, 95% of which is intended for export. About half of the products intended for export are directly exported in the EU and abroad, while the other half is intended for legal entities in Romania (often subsidiaries of international firms).

ENERGOM is made of two business units: one integrates electrical components into finalised products, and the other one produces intermediary electrical components. Through its two business units, the firm acts as a producer, as well as subcontractor in the design of industrial machinery. ENERGOM provides its services both within the Gonzalez group (formed of complementary firms in the production chain) and outside it (such as the SOWAT system). Within SOWAT, ENERGOM is responsible for assembling the system based on the technical specifications provided by Khar & Partners. ENERGOM also proposes design solutions for the water filtration system³.

1.3. Description of global value chain member 2: Pipeco

Pipeco is a manufacturer of water tanks created in 1984 and based in Malaysia. At the time of writing, Pipeco has 250 employees along the production chain (from manufacturing to management), most based in Malaysia. Two employees are based in France, and are responsible for the distribution and business development in Europe and South Africa, Pipeco's main export markets. The firm's clients include property developers, public utilities firms, large infrastructure actors (for example, airports, metro systems), as well as manufacturing firms that include water tanks into their products. The firm cooperates with many small distributors in Europe via its French arm.

The company, registered in France and Malaysia, created the concept of modular water tanks, and abides by various industrial standards, including the French 'Attestation de Conformité Sanitaire' (ACS, or Sanitary Compliance Accreditation). The product standards enable the water tanks used in the SOWAT project to maintain a constant water temperature, and therefore fresh water, for 60 days. This technical advantage – Pipeco is considered one of the few producers in the world that can

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² NACE Code C27 – Manufacturing of electrical equipment, according to Romanian company directory ListaFirme.Ro. Retrieved from: https://www.listafirme.ro/energom-srl-14918913/

³ ENERGOM is involved in the design of SOWAT from a manufacturing point of view: It advises on ways to make the system easy to transport, as well as resilient in its intended operating climate. It also advises on solutions to adapt the product's technical specifications according to its export market. ENERGOM's involvement is limited to the design/manufacturing process and does not extend to SOWAT's commercialisation process.

guarantee this feature – can be useful for keeping a supply of fresh water in the arid conditions that the SOWAT system is designed for.

1.4. Description of global value chain member 3: ProEdge

ProEdge is a marketing, representation and franchising firm based in New Delhi, India. The firm was established in October 2015, and is in the process of setting up an office in Sri Lanka in summer 2017. With 21 employees at the time of writing⁴, ProEdge specialises in three sectors: loyalty marketing, international master franchising and representation. They provide their services in India and, soon, in Sri Lanka.

ProEdge works with firms such as hotels, spas and retailers that want to develop their loyalty marketing schemes. In addition, the firm helps international firms (mainly high-end brands) expand to India via franchising or representation, as it is the case for SOWAT.

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⁴ The firm plans to expand its employee base to 50 by the end of 2017.

2. Internationalisation activities of the born global enterprise

International activity is at the core of all four aforementioned companies involved in the production and distribution of the SOWAT system. Some (such as ENERGOM, Pipeco) rely almost exclusively on export markets for their products, while all cooperate with international partners in either research (Khar & Partners), distribution (ProEdge, Pipeco), or production (ENERGOM).

2.1. Overview of internationalisation activities of Khar & Partners

Khar & Partners started its international activities since its creation in 2013 through scientific research cooperation with members of its scientific advisory committee (see section 3.2 for more information), as well as with members of technological clusters such as the Water Sensors and Membranes cluster in France. Scientific cooperation between Khar & Partners and their network often expanded into business development opportunities (for example, expansion in different markets such as North Africa, or participation in international fairs as the ones in Morocco or Brussels), especially with some members of the advisory committee, as well as in the Francophone Business Club in Sibiu.

Research cooperation led to the creation of an export-oriented product. Their first product, at that time in prototype phase, was installed at the PAACO farm cooperative in Madagascar via the Manaode NGO. Subsequently, SOWAT systems were <u>installed</u> in Morocco, but also in <u>Romania</u>, where 35% of the population does not have access to potable water. Its expansion was made possible through the firm's participation in international fairs (such as the Morocco Meknes International agriculture show in 2015, or the Brussels Expo in 2016), as well as in international start-up competitions (such as StartUp Istanbul in 2016, the Innovation Prize of the Franco-Romanian Chamber of Commerce in 2016, or the Chivas Venture 2017).

In the production and distribution process, international activities include intermediary components such as the water tanks produced by Pipeco in Malaysia or ultra-filtration systems from Polymem (France), as well as distribution via international firms like ProEdge in India or Treiplas in Morocco.

2.2. Importance of internationalisation activities for the born global: main served markets

The main export markets for SOWAT are India, African countries (especially Northern Africa, but also Congo and Nigeria), and South-East Asia. In Khar & Partners' business plan, 70% of SOWAT sales are expected to be international, while the remaining 30% are envisaged for the Romanian market. Until 2017, most SOWAT systems were exported. In 2017, up until the time of writing, 90% of the company's sales were in Romania, especially because of the exposure granted by the participation in the Chivas Venture competition. Nevertheless, the firm aims to further develop its presence in India and Africa in 2017, and its sales in Asia in 2018.

2.3. Reasons to go international and for the specific target market selection

Khar & Partners, as a firm, was established with the intention of being involved in global value chains. The decision to face foreign markets was not taken at a later stage in the firm's development, but it was one of its inherent assumptions. Its products, though being applicable in Romania, are designed for export. For instance, 35% of Romania's population does not have access to potable water, a solution for which the SOWAT system is implemented in certain rural, isolated areas. In addition, horses are frequently employed in agricultural activities, providing a market for Khar & Partners' GLADIATOR 4G horse supplements. Finally, Romania had by far the highest number of agricultural holdings in the EU-27 in 2010, while the utilised agricultural area made up 56% of the country's territory. In terms of employment, 73% of Romania's active population worked in agriculture in 2010, by far the highest proportion among EU Member States.

The rationale for the firm's international orientation is manifold, and reasons include the founders' international profiles, the target market specifications (for example, arid, water-deprived, often conflict-zone areas with poor water infrastructure), the founders' existing relations with the wider EU-

level scientific community, but also more practical reasons such as the lack of local suppliers for certain components of SOWAT like water tanks.

The choice of specific export markets was made partly because of the founders' existent professional relations (many francophone collaborators), their market knowledge (for example, in his previous career Mr Al Mezayen was responsible for business development tasks in South-East Asia), and partly due to their demand for products such as SOWAT. The product is intended for mostly rural, deprived areas with no access to potable water, often in conflict zones and in developing countries.

2.4. Main challenges to engage in internationalisation activities and solutions adopted

The challenges for Khar & Partners related to its engagement in internationalisation activities are both internal (company-specific) and external (market- or regulatory-specific). Internally, the most important challenge is the firm size, which affects the potential budget it can dedicate to expansion or product quality certifications. External barriers to internationalisation include the large distance between producers, suppliers and customers.

Financial and technical constraints and procedures necessary to participate in product certification schemes can prove difficult for small firms like Khar & Partners. At the time of writing, SOWAT has three international certifications⁵. Some (such as ISO 9001) are useful for later obtaining others (such as CE marking), but the process takes time and can be costly. As an example, the Khar & Partners' operational director (Mr Al Mezayen) estimates that the CE marking costs close to €100,000.

However, the firm considers that the advantages deriving from certifications outweigh the costs and the long waiting time, hence the firm prioritises the investment of their monetary resources in the certification process, as it enhances the product's credibility and facilitates its product's export. In this respect, at the time of writing Khar & Partners intend to allocate resources to obtain the CE marking certification; as the certification is made by an external certifying body, an advantage is that the body bears responsibility in case the products fail to meet certain standards.

Khar & Partners facilitated the process of obtaining certifications due to its director's previous knowledge of how to apply and how to obtain such certifications (in particular the ISO 9001). The topic of product certification was also brought up by a Pipeco representative, who remarked that it took them one year and a large amount of money to obtain the ACS certification.

Finally, in terms of external challenges to internationalisation activities, the most relevant challenge is the geographical distance separating the various companies involved in the project, as well as the producer and the end client. As later described in section 4.4, the companies took steps to streamline the initially-centralised process of production and delivery, and rendered the distribution model more efficient.

It is important to note that, although certain administrative hurdles were experienced (see section 5.1), the companies did not mention any other relevant external challenge in their internationalisation activities. However, this could also be due to the already-existent international experience of Khar & Partners' founders: as internationally-minded people with experience in developing countries, they did not encounter problems familiarising themselves with local conditions or rules. Other types of firms, however, might see cultural adaptation, to name just one aspect, as a barrier to internationalisation.

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⁵ The French ACS, the NSF/ANSI 61 certification issued for the US and Canada, as well as the international ISO 9001 certification for quality management systems.

3. Global value chains of the born global

3.1. Identification of global value chain(s) of the born global

Within the SOWAT project, Khar & Partners relies on various international links to bring the product to market. International cooperation started from the design phase, where the input of the firm's international scientific committee in terms of R&D helped shape the product. In the production process, even though the system is produced in Romania, various components are imported (for instance, water tanks from Malaysia and ultra-filtration devices from France). Finally, in the distribution phase, most SOWAT systems are destined for export, and the process is facilitated by international distributors.

3.2. Main roles of the born global and its partners and governance issues

Within the **design phase**, Khar & Partners is responsible for designing the blueprint of the SOWAT system, and to constantly innovate it (at present, the SOWAT systems are at their fourth generation). The company relies on input from two other stakeholders, one internal (its scientific advisory committee), and one external (the manufacturer ENERGOM). The scientific committee provides guidance in product development and market guidance for international expansion in areas such as Middle East and Maghreb countries. Often, committee members facilitate interaction with potential distributors, or advise on how to implement and take advantage of the latest technologies or research in the water filtration field. The committee is an integral part of the firm.

Design advice is also provided, on a more technical level, by manufacturer ENERGOM. ENERGOM is responsible both for the manufacturing process itself (for example, assembly) and for part of the design process. As part of their framework contract with Khar & Partners, ENERGOM assembles the SOWAT systems, but also takes part in regular meetings with the designer on how to improve the system's functionality. Final decisions on design changes are taken by Khar & Partners, but they are often based on ENERGOM's suggestions. The framework contract specifies certain governance aspects such as how decisions are taken, how approval procedures for technical changes are followed, what prices and rates must be respected, what deadlines should be in place (for example, for the manufacturing of each unit component), how dispute resolution mechanisms work, and what type of services can ENERGOM provide to Khar & Partners. Within this framework contract, ENERGOM's integration unit is responsible for technical advice for improving the water filtration system.

In the **production phase**, Khar & Partners plays a secondary role, leaving ENERGOM in charge of assembling the product. The assembly times, rates and specifications are indicated in the abovementioned framework contract between the two companies. In addition Pipeco is responsible for providing intermediary material (water tanks) to Khar & Partners, which afterwards assembles them on the SOWAT system once it is received from ENERGOM. The water tanks are delivered from Pipeco's office in France, where they arrive from Malaysia. This commercial relationship is governed by contracts specific to each order. Informally, the relationship expanded beyond a mere client-supplier one to include informal advertising or advice on how to best create synergies between Pipeco's offer and the SOWAT system.

In the **distribution phase**, Khar & Partners is the main contact point for existing and potential new clients. The firm's business development activity involves participating in international fairs and competitions and replying to various requests for samples, on-site visits or information on the product's specificities. However, in markets further away, the firm relies on distributors. Distributors, such as ProEdge, are responsible for promoting the SOWAT system on foreign markets, such as India in this case. Khar & Partners has a formal agreement with ProEdge to develop the Indian market, and represent the company there.

4. Cooperation between the born global and its selected international partners in value chains

4.1. Brief history of the cooperation(s) and reasons for initiating them

As an innovative start-up in the Research & Development sector, Khar & Partners' existing commercial relations often started as informal contacts, most often between the company's operating director, Khaled Al Mezayen, and other company representatives.

Khaled Al Mezayen met with the director general of ENERGOM through the Francophone Business Club in 2015. Mr Al Mezayen is a co-founder and active member in the club, which he says has allowed him to meet many useful contacts for his company's development. The club reunites local entrepreneurs who speak French or have a personal or professional interest in France or French-speaking countries. Its goal is to help foster relations and provide advice to entrepreneurs on the market. The club is also an active supporter of foreign investments in the region, and partners up with various local and international entities to facilitate such investments.

After the meeting between the ENERGOM director and Mr Al Mezayen, the two kept in contact, and ENERGOM's director referred Mr Al Mezayen to one of his firm's two business units, which is now manufacturing the SOWAT system. Alin Zapartan, business unit manager in ENERGOM's integration division, now liaises between his company and Khar & Partners.

Another informal contact which later turned into a commercial partnership is the meeting between Mr Al Mezayen and Mr Baljit, Director at ProEdge. The two met at the StartUp Istanbul competition in 2016, after which they kept an informal relation until late 2016, when it was formalised through a contract. Though the SOWAT system was not yet envisaged to expand to Asia at that point, the good contact between the two company representatives allowed the commercial relation to develop later, and now ProEdge represents the SOWAT system in India and South Asia.

Finally, Mr Al Mezayen met Pipeco's director, Mr Richard, after Khar & Partners submitted a purchase enquiry to Pipeco for its water tanks. Khar & Partners was on the lookout for potential suppliers of water tanks, and, among others, submitted an enquiry to Pipeco. After the enquiry, and once Mr Al Mezayen presented the project, Mr Richard decided to visit the firm and its research facilities in person. He travelled from France (where he is based) to Sibiu, where he met Mr Al Mezayen and visited the firm's facilities, as well as a prototype of the SOWAT system. This encounter allowed the two firms to gain more trust in one another, and to facilitate future commercial transactions.

4.2. Roles of the born global and the selected partner(s) within the value chain

Khar & Partners designed the SOWAT system, and provided a blueprint for the prototype to ENERGOM. Through various meetings with ENERGOM, the manufacturer advised on improvement solutions such as the Euro-pallets dimensions, or durable material for the exterior case to withstand adverse weather conditions. Khar & Partners and ENERGOM meet regularly to discuss potential improvements, and at the time of writing, SOWAT systems reached their fourth generation. The latest version allows the system to automatically programme its cleaning cycles based on the local water source's composition⁶. ICT therefore plays an important role in the development and further improvement of the SOWAT system.

ENERGOM exchanges communication and blueprints with Khar & Partners via electronic means. Such ICT tools also allow the companies to better understand the impact of certain changes in SOWAT's capabilities depending on the various technical tools used.

Pipeco is responsible for providing water tanks to Khar & Partners, based on agreed-upon rates and technical specifications. Although ICT in this relation plays a weaker role than in the relation

⁶ Previously, SOWAT engineers had to manually configure the automatic cleaning cycles based on water conditions.

described above, the two firms established first contact via an online purchasing enquiry. The initially-virtual contact developed into a more personal relationship.

ProEdge, as well as other overseas distributors, rely on technology to maintain communications with Khar & Partners, as well as to exchange commercial and technical files. Upon the first interaction between the firms, technology provided the venue of the encounter – the StartUp Istanbul competition, an event for 'digital-minded companies'.

4.3. Governance issues and formalisation of the cooperation

In terms of governance, the interfirm relations are regulated by framework or order-specific contracts.

The formalisation of interfirm cooperation was always a secondary step, after a first informal encounter between company representatives on both sides. The initial personal contact developed into a 'gentleman's agreement' type of commercial cooperation between firms, and later on evolved into a formalised rapport. As explained by Mr Al Mezayen and Mr Richard during interviews, trust in a partner is a decisive factor in whether two companies will formalise their commercial relationship.

The long time needed for this formalisation is important to allow the two partners to get to know each other's work style, expectations and abilities. Such relations require time and frequent face-to-face encounters to consolidate and to create trust. For instance, with the Moroccan distributor (whom the Khar & Partners' director initially met at an international fair in Morocco in 2015), a formal cooperation contract was finally signed by both parties in October 2016 after the successful accomplishment of several small-scale commercial operations between them.

In terms of governance, Khar & Partners is always represented by Mr Al Mezayen. He interacts with external stakeholders for both business-related and technical aspects. The Khar & Partners team of engineers, however, is more involved in technical aspects, especially with the manufacturer, ENERGOM.

4.4. Evolution of the cooperation over time

The cooperation for the SOWAT system between Khar & Partners and its collaborators has gradually increased over time. This is due to increased sales, a broader international expansion, improvements in product technology, as well as the consolidation of existing partnerships.

In the case of Pipeco, what started as an initial business relationship in 2015 gradually evolved to include informal word-of-mouth advertising for the SOWAT devices. In addition, the Pipeco director expects to be able to supply water tanks directly from Malaysia to Romania, whereas at the time of writing these are first imported through France.

In the case of ENERGOM, the manufacturer became more involved in improving the SOWAT system over time. Through its framework contract with Khar & Partners, the two firms' representatives meet regularly to discuss potential improvements or existing manufacturing orders. ENERGOM suggested, during an interview, that they expect to be able to export the SOWAT systems directly later in 2017. As of March 2017, ENERGOM delivers finished products to Khar & Partners in Sibiu, who afterwards ships them to their clients.

As of March 2017, ProEdge is building the Indian and South-Asian market and expects to increase in activity with time. The informal contact made during StartUp Istanbul 2016 has been formalised through a commercial agreement, which is expected to produce results in 2017 and especially in 2018. According to Mr Al Mezayen, India and South Asia are the company's main target markets for 2018.

4.5. Results of the international cooperation for the different enterprises

As indicated above, the SOWAT system is the result of the cooperation between several enterprises. Khar & Partners is the designer and owner of the SOWAT system blueprint. The enterprise developed the system thanks, in part, to technical and business input from its scientific advisory committee. Khar & Partners cooperates with the Romanian-based ENERGOM manufacturer to produce the water filtration systems, as well as with France-based Pipeco for the supply of its water tanks. Finally,

although its business development efforts are spearheaded centrally by Khar & Partners, the enterprise relies on distributors like ProEdge to represent its products in overseas markets, such as India and South-East Asia.

The above-mentioned commercial rapports between the companies resulted in the successful manufacturing and distribution of the SOWAT water filtration system, both in Romania and beyond the EU. In addition to rapid market expansion, the international cooperation helped the product improve from a technical point of view.

5. Main challenges to engage in international cooperation activities

5.1. External and internal-to-the company barriers

The interviewed representatives of the four companies did not report any major obstacle or challenge for engaging in international cooperation activities. Nevertheless, trust was often cited as a prerequisite for a successful international rapport.

As suggested by the Pipeco director, who had a negative commercial experience with a previous Romanian partner due to lack of trust, it is crucial to establish a good informal relationship before formalising it via a commercial agreement.

Finally, administrative export requirements can also pose problems, as testified by ENERGOM, the manufacturing firm in SOWAT's value chain. Administrative requirements may be an external barrier to engaging in international cooperation activities. Although this does not apply for the SOWAT system, for which export licenses are easy to obtain, ENERGOM encountered numerous administrative hurdles concerning the export formalities for some of their products. This is especially the case for intermediate products: custom authorities often ask for detailed documentation for each type of material, or component within the product they are shipping abroad. They have also encountered cases where customs officials would require the firm to indicate the end use of their export. This is often difficult, since they produce intermediary parts and it is up to their clients to decide about their final use. In general, ENERGOM representatives consider the export procedures for extra-EU markets as burdensome.

5.2. Solutions adopted by companies to solve these challenges

The solution adopted by Khar & Partners for facilitating trust, as well as for increasing their chances to meet useful contacts, was to join various national or international networks. In addition, his company cooperates in European company clusters, such as the Water Sensors Membranes Cluster, or the European Fruit & Vegetables Cluster. Word-of-mouth advertising, particularly via Pipeco, is also useful to gain credibility towards potential clients.

Moreover, the firm sought to increase its reputation, and thus to have a higher credibility by competing in international start-up contests. Competitions such as StartUp Istanbul 2016, CCIFER 2016 or the 'Chivas Venture 2017' helped Khar & Partners gain publicity and interest from potential partners or clients, in addition to monetary prizes. Such participations, coupled with participations in international fairs like the International Agriculture Fair in Morocco in 2016, expanded the company's network and credibility.

The reliance on certifications, as described in section 2.4, is another way through which Khar & Partners increased the SOWAT system's credibility. As indicated by its director, and confirmed by Pipeco's director, certifications are an important trust-building tool that is easily recognisable abroad. In addition, they act as a safety net for both Khar & Partners, as well as for the clients: the reliance on an external certifying body ensures clients that the product adheres to certain standards, while it protects the designer from potential unfounded claims related to the product's malfunctioning.

Finally, ENERGOM relied on a dedicated internal team, as well as on close cooperation with border authorities to comply with the necessary administrative requirements. These resources would be more difficult to manage for smaller-scale companies, although the ENERGOM representative indicated that border authorities were rather helpful most of the time.

6. External support to internationalisation and international cooperation

6.1. Main identified needs for external support

The four enterprises interviewed did not point to major needs for external support with regards to their internationalisation or international cooperation beyond those already indicated in section 2.4. As mentioned in section 2.4, as well as section 5.1, the following needs appeared relevant for the development of an international orientation or international cooperation among the firms involved in the SOWAT project:

- a) The need to foster trust between partners, particularly through face-to-face interactions, initial 'gentlemen's agreements' and obtaining certifications.
- b) The need of assistance in handling administrative requirements, particularly for smaller firms.
- c) The need of assistance to cover the costs of certification schemes.
- d) The need for a network of like-minded entrepreneurs that could provide business advice and coaching on often-encountered issues.
- e) The need to overcome geographical distance through streamlined agreements and framework contracts that would allow the production and distribution process to evolve more efficiently.

6.2. Use of external support

Khar & Partners and ENERGOM did not make use of any publicly available external support to develop, improve or bring the SOWAT system to market. Khar & Partners did, however, make use of private external support through prizes and contests for financial and reputational gains, as well as the Francophone business club for networking purposes. The justification for this was that there are very few public support instruments available for such firms in Romania, and even those very few relevant instruments are not adequately publicised. For example, the Ministry of Economy, Trade and Business Relations offers (co-)financing (up to 100%) for the costs of participating in international fairs and exhibitions. However, the management was not aware of the existence of this instrument.

Another attempt for the use of external support was when Khar & Partners approached the local Regional Development Agency to enquire whether the company can make use of EU funds. The Francophone Business Club in Sibiu convinced the agency to send one delegate to hold a presentation to the business club on the opportunities offered by EU funds in the region. However, the Khar & Partners director felt that no practical support was offered, for instance, on how to fill in the many documents needed for the application, or on determining whether the firm would be eligible for such support.

6.3. Assessment of this external policy support

Although no external support was used in developing, improving or bringing the SOWAT system to the market, stakeholders pointed several aspects that the public sector could improve on, namely the approach to taxation, the approach to entrepreneurship, and the regulatory burden imposed upon SMEs. Although these are not support measures per-se, they are public services that SMEs must use before being able to export their goods abroad, and are therefore indicated here.

The approach to taxation in Romania has been criticised by the designer Khar & Partners, because of the system's lack of tax incentives for innovation expenses. According to the company, they could not deduct their R&D expenditure from their profits, and therefore they must pay taxes on it. This is because the R&D expenditure occurred in a different financial period than when profits were recorded (it took about three years of R&D investment to obtain a product that could be brought to market). In addition, the company points out that the tax system in Romania does not promote innovation, but is rather tailored to intermediaries and resellers.

The approach to entrepreneurship in Romania is also far from perfect, according to the two Romanian companies interviewed. There are very few export support instruments, and the existing ones are not

well-advertised. Policy support measures, such as government-funded incubator programmes, or prizes, are absent in Romania, while they are present in other countries such as France or the UK. Khar & Partners had to rely on private sources (such as the Chivas Venture) for such opportunities. Finally, the Romanian companies complained about the high regulatory burden, both on export requirements (see section 2.4), or for issues such as paying taxes or complying with health and safety requirements. The authorities' approach, based on the interviews collected for this case study, is rather punitive than proactive: companies risk large fines if they do not comply with requirements, rather than the state encouraging compliance via some sort of benefits. To avoid potential fines due to a lack of knowledge of the ever-changing laws, entrepreneurs such as Mr Al Mezayen group in business

networks such as the Francophone Business Club, or in informal networks of R&D firms. Together, entrepreneurs share the knowledge of the latest regulatory requirements or potential compliance

solutions among them.

7. Concluding remarks

7.1. Future plans regarding internationalisation and international cooperation

The SOWAT project, as of March 2017, is expanding rapidly on the global markets, and because of this growth, its partners plan several changes, such as:

- Pipeco expects to deliver its water tanks directly from their production site in Malaysia, rather than importing them through France and delivering them from France to Romania, as they do now
- ENERGOM expects to also handle the delivery of finalised products towards their clients, rather than to ship them to Khar & Partners, which in turn sends them to the clients.
- Khar & Partners and ProEdge envisage focusing on the Indian and South Asian market in 2018 and 2019, whereas at present Khar & Partners is consolidating the Romanian market and exploring the North African one.

Given the positive growth of sales, the cooperation between the four companies is expected to grow, and extend to cover other activity areas (see above).

7.2. Conclusions and lessons learned

To conclude, it is important to highlight the role of trust in fostering international cooperation. In this case study, the interviewed companies met at events, or via informal enquiries, and built a rapport based on face-to-face meetings and 'gentlemen's agreements' before formalising relations. While in this case study the relations presented were successful, some interviewees pointed out the potential drawbacks that lack of trust, or insufficient trust may bring to international cooperation activities. From a policy perspective, it is therefore important to enable local born global enterprises to easily build trust, for instance via:

- Financial subsidies to cover costs of product certification, or participation in international fairs;
- Network building between local and international firms via regular events, online tools or offline office space;
- Proactive engagement from public authorities to help born globals better promote their products, allowing them to build trust among their potential clients.

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