

Turning Innovations into Commercial Success: From Theory to Practice

The Case of the Rose Industry in Bulgaria

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Outline

1. JA Bulgaria and The Edge: Research and Business Development
2. Partnership with South Korea
3. The Bulgarian Rose
4. Damascena Company and Their Products
5. Technology Demands
6. Other Partners and Opportunities



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JA Bulgaria Introduction

- Leading organization with established reputation for providing **innovative, cutting-edge education to students from kindergarten to university**
- The educational portfolio includes programs in three thematic areas: **entrepreneurship, financial literacy and employability skills**
- Applies philosophy based on the “**learning by doing**” method, **blended classroom and use of digital content and technologies**
- **Possesses strong R&D and R&BD competences**
- **A member of JA Worldwide and its regional operating centre JA Europe**

Microsoft®



SAMSUNG



JA Bulgaria Impact

- For the last 20 years JA has reached **over 300,000 young people, supported by 12,000 school teachers and 11,000 business volunteers**
- **JA alumni created 100+ real businesses and 1000+ new jobs** as part of the BSC and MSC entrepreneurship course – *“JA Startup Program”*

imagga

DREAMIX

Komfo
SOCIAL MEDIA MARKETING AT SCALE

webmotion
digital agency



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JA Bulgaria Achievements



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The Edge Introduction

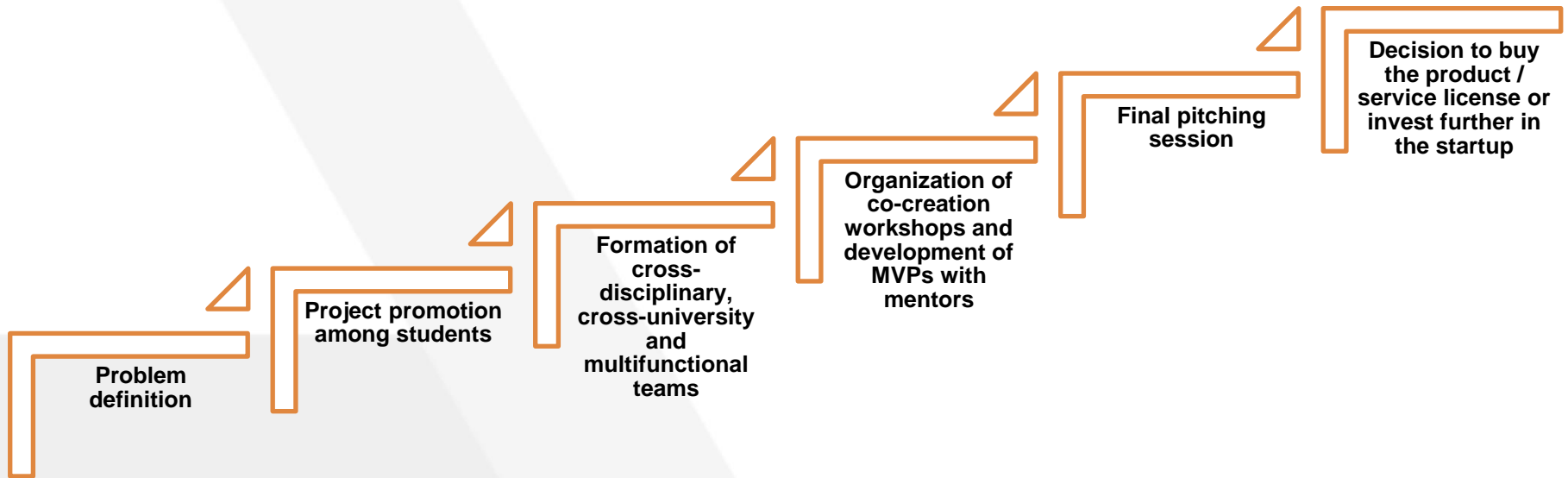
- **A spin-off company of JA Bulgaria** aimed to fill-in the gap between innovative high-tech academic research in Bulgaria and its commercialization worldwide
- Aims to improve companies' competitiveness by using **open and disruptive innovation paradigm, lean startup and proven university business collaboration model**
- Offers the following services: **creative co-design, new technology and knowledge transfer, consulting, mentoring and others**
- Applies innovative techniques such as: **Lean LaunchPad education program, Design Thinking and modern methods for corporate intra-preneurship and “startup” mindset**



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Sample Scenario



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Partnership with South Korea

- Already signed Memorandum of Understanding with **GCC KAIST**
- **Newly established Bulgarian – Korean Chamber of Commerce since October, 2017**



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ТВО НА РОЗОВО МАСЛО
ЕВЪ & КИДОВЪ



DISTILLERIE ESSENCE DE ROSES
BONTSCHEFF & KIDOFF



The Bulgarian Rose (1/2)

- The oil-yielding rose was **brought to Bulgaria by the Ottoman Turks in the 16th century**
- **Two species are cultivated currently – Rosa Alba and Rosa Damascena**
- **Grown in a special geographical region – the Rose Valley, having the best conditions for the purpose:**
 - mild winter with average annual temperature 10,6° C;
 - high humidity in May – June – the rose picking season;
 - light sandy cinnamon forest soils that do not retain water.
- **Possesses numerous health benefits attributed to its properties as an antidepressant, antispasmodic, antiseptic and others**
- **In the beginning of the 19th century first steps were made towards international trade – to Edirne, Paris, Dresden, Vienna, London**



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Source: Institute of Roses, Essential and Medical Cultures

The Bulgarian Rose (2/2)

- Contains over 200,000 ingredients making it suitable for perfumery – **Bulgarian rose oil is the basis of 90% of the perfumes worldwide**
- Applied mainly in **medicine, healthcare, cosmetics industry and aromatherapy**
- **Marketable rose products include:** rose oil, rose concrete, rose absolute, rose water, rose jam, dried rose flowers and etc.
- Blossoms at the end of May and the beginning of June, **during a period of only 12 days**



Figure 1: Stages of Rosa Damascena

Krasimir Rusanov, Natasha Kovacheva, Mila Rusanova, Ivan Atanasov,
"Traditional Rosa damascena flower harvesting practices evaluated
through GC/MS metabolite profiling of flower volatiles", May 2011



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Health Benefits of Rose Oil

- Fights depression and anxiety
- Sedates inflammation
- Treats wounds
- Protects against viruses
- Eliminates bacteria
- Purifies the blood
- Maintains liver health
- Prevents toxicity
- Reduces stomach disorders
- Regulates hormones production
- Promotes circulation
- Reduces blood pressure
- Others



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The Bulgarian Market

- **Currently around 3,700 – 3,800 hectares of rose plantations** and the numbers have been rising
- **In 2017, about 17,000 tons of rose petals were collected** at an average yield of 450 kg per decare
- **The average annual production is around 1,500 kg of rose oil**
- **1 ton rose petals is needed for the production of 1 kg rose oil**
- **Main stakeholders:** Ministry of Agriculture and Food, Bulgarian Agricultural Academy, Bulgarian National Association for Essential Oils, Perfumery and Cosmetics, Institute of Roses, Essential and Medical Cultures, Companies: Alteya Organics, Biofresh, Bulgarian Rose Karlovo and others



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Source: Institute of Roses, Essential and Medical Cultures



The International Market

- **Leader on the international market with around 50% market share**
- **Constantly increasing demand with 95% exported to France, Germany, Japan, China, USA, UK, Australia and others**
- **Record high prices over the past five years – €4,200 per kg in 2009 and €10,000 per kg in 2017**
- **The price of organic rose oil is even higher – currently ~€14,000 per kg**

In 2014 Bulgarian rose oil was **registered in the European union as Protected Geographical Indication** – indisputable recognition for its quality and uniqueness



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Source: Institute of Roses, Essential and Medical Cultures

Damascena Company

- **A family-owned Bulgarian company** established in 1991
- Specialized in the production of **rose oil, essential oils, floral waters and natural cosmetics**
- **Currently, the leader in the production of essential oils and raw material** with almost no competition in the cosmetics industry
- **Owns 30 hectares rose fields and 30 hectares lavender fields**
- **Possesses three distilleries for oils' production** – from rose, lavender, immortelle, chamomile, pine, lemon balm, Mellisaofficinalis and Juniper berry
- Owns one of **the largest ethnographic complexes in the country**



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Source: www.damascena.net

Damascena Products



Rose soft drink,
500 ml
art. № 0733



Universal face cream
30 ml
art. № 0535

Set essential Oils – 6 x 10ml
art. № 0023



Melissa
day face cream



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Source: www.damascena.net

Technology Demands

- **Localization and distribution of existing products and raw materials for the South Korean market** – e.g. food supplements, rose oil water, floral waters, face cream with rose oil, essential oils
- **Creation of new, innovative products focusing on their bio and medical properties** – e.g. yoghurt with rose, car air fresheners, advanced localized food supplements and cosmetic products with healing properties
- **Automatization of the rose picking process** through the development and commercialization of a relevant machine / robot / glove
- **Research and development of innovative solutions** for improving the whole life cycle – e.g. rose oil extraction and etc.
- **Organization of co-creation and innovation camps** with Korean and Bulgarian students



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Other Partners and Opportunities (1/2)

- MobiSystems is a Bulgarian company – global leader in the mobile productivity sector
- Has offices in USA, Europe and Hong Kong
- Its Android mobile office – OfficeSuite, **is the best-selling mobile office with over 300 mln users worldwide, 50 mln monthly active users and 100,000 unique new daily users**
- Preloaded on top device manufacturers such as: **Sony, Alcatel, Toshiba, Sharp and ZTE**
- Other MobiSystems apps include: **File Commander (100 mln users), Oxford Dictionary of English (50 mln users), Aqua Mail (5 mln users), OfficeSuite for iOS (5 mln users)**



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Other Partners and Opportunities (2/2)

- **TT (Technology Transfer)**

- **PL (Product Localization)**

Looking for B2B partnerships for the OfficeSuite, File Commander and Aqua Mail products. Most desired type of partnerships are preloads on OEMs and network carriers. Also seeking distribution to SMEs for the Windows-based cross-platform office pack, OfficeSuite Now. The distributors could be either system integrators or SME/start-up advisor entities. The product could be customized to fit the Korean market. Schools / universities could also be interested in purchasing our Oxford Dictionary of English app.

- **CP (Co Project)**

Looking for domestic partners with products that can complement the functionality of its technologies and enhance its market realization. For instance, the office pack technology could be offered to a local MDM provider who can distribute to domestic companies, as part of its corporate services. Another partnership scenario could be for MobiSystem's technology to be part of software bundles that are preloaded on network carrier devices in Korea (we take part in a similar program in Japan).



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감사합니다
Thank you! Благодаря!

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