2016: ACTIVITIES REPORT

UTEN Portugal
University Technology Enterprise Network

Commercialization Outlet for Portuguese Science and Technology
PROLOGUE

December 19, 2016

Whereas the CoLab portion of the UT Austin-Portugal Program has generally focused on creating and disseminating knowledge through joint research, academic exchanges, workshops, and conferences, the UTEN portion has focused on creating commercial value based on the outputs of the Portuguese partner institutions. Initially the focus of UTEN was on helping Portuguese partner universities and entities develop protocols and processes to identify inventions and technologies emanating from their laboratories and incubators that might have commercial value. This was accomplished in part by having UTEN specialists from The University of Texas at Austin spend significant time in situ with Portugal partners. In addition, many Portuguese technology transfer officers spent between 3 and 6 months in Texas embedded in the ecosystem and learning by doing. This first phase of UTEN was thereby focused mainly on on-the-job training, which created a cadre of experienced commercialization professionals in Portugal. During this initial period, Portuguese partner universities executed 26% more licenses per year, generated almost 140% more license income, and reported 130% growth in the number of new spinoff companies.

During the course of the UTEN Program this focus morphed into helping start-ups, spinoffs, and “newcos” (new companies) associated with the Portuguese partners develop business strategies, tactics, and pitches as well as organizational structures. More recently, and particularly in 2016, UTEN has created a new initiative – the Global Startup Program (GSP) – focused on helping individual companies gain “traction” in markets other than Portugal, mainly in the United States. Gaining traction has encompassed helping Portuguese companies acquire customers, raise investment capital, identify channel partners, and address virtually all of the tasks required for financial success.

To date four cohorts of companies have completed their participation in UTEN. Several of these companies have demonstrated significant financial success. Others have not been successful. Even so, all companies supported by UTEN have registered their satisfaction with the program and have obtained valuable experiences. The six companies comprising the 5th (and final) cohort of the UT Austin-Portugal UTEN Program are currently being trained, assisted, and mentored. This report describes the current UTEN companies and their ambitions. Because it takes considerable time, effort, resources, and some luck for newly-established companies to gain traction and be financially viable, assessing the long-term success of recent cohorts and, indeed, the UTEN Program itself, requires patience.

Looking Back into the Future

To date more than 40 Portuguese institutions and in excess of 200 companies have participated in UTEN-related activities over the nine years of the UT Austin-Portugal Program. Moreover, hundreds of Portuguese professors, research scientists, graduate students, post-docs, and would-be entrepreneurs and company founders have been exposed to leading-edge business concepts and practices and offered guidance about entering markets in the United States and elsewhere. Succinctly stated, UTEN has had a significant and measurable impact on both the scientific community and the business community in Portugal. Companies such as Feedzai,
Biopremier, Take the Wind, Omniflow, and Veniam have not only achieved financial success as ongoing concerns, they have created direct as well as indirect employment opportunities in Portugal (think about the supply chains and distributors required for these companies to operate). More important, these companies offer proof that even small, start-up Portuguese companies can compete globally. Consequently, these companies serve to stimulate the entrepreneurial spirit of innumerable others who in turn can and will create an entrepreneurial ecosystem in Portugal that benefits all of society.

In particular, the UTEN GSP initiative has had a major impact on the Portuguese economy. Since 2013, GSP companies closed deals with a cumulative direct and indirect value of $130 million and hired 67 highly skilled Portuguese. During this period UTEN has effectively returned $40 for each dollar of FCT funding.

The most recent cohort of UTEN companies consists of two types, companies that need serious business development assistance and companies that need basic acceleration assistance. The UTEN team has learned from the experiences of these different types of companies and their needs. This learning has led to a proposed shift in the UTEN strategic approach to more broadly assisting Portuguese institutions and their spinoff and start-up companies in their quest for commercial success.

In 2017, the UTEN team will continue the GSP with a new cohort of companies and at the same time will be organizing a comprehensive hands-on technology commercialization training initiative in Portugal for university-based professionals — faculty members, researchers, entrepreneurs, and TTO and incubator managers. This initiative will be based on lean launchpad and customer discovery methodologies for early stage technologies all the way to the point of selling those technologies in the global marketplace. We truly believe that this initiative will be a groundbreaking program that will lead to increases in intellectual property licensing and start-up growth.

The UTEN journey has been great so far and more exciting activities are proposed for 2017 that will set the stage for the future of the program. We are looking forward to this journey!

Respectfully,

Robert A. Peterson, Ph.D., Principal Investigator

Marco Bravo, Co-Principal Investigator and Executive Director
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1. UTEN: an engine for growth in Portugal

“We have a similar program at MIT, so it’s great to have this in two different locations with two different experiences, and to expose our faculty and companies to the two environments. It’s very complementary.”

Paulo Ferrão, President, Portuguese Foundation for Science and Technology (FCT)
1.1 UTEN by the numbers: Impact

**2007-2012: Building a country-wide network of technology transfer experts**

20% increase in patents granted/year

26% increase in executed licenses/year

137% increase in license income

132% increase in new academic spinoffs

127% annual growth in revenue

37% growth in exporting technology

38% annual growth in hiring

* independently assessed by Aurora Teixeira (FEP), 2007-2014

**2012 -2016**

$95M direct economic impact

$27M investment risk capital

$27M committed revenue

$27M strategic capital (trials)

Product launches: US, India, SAARC countries, China

3 spin-out companies generated

67 qualified jobs created

$35M wage impact

$130M total economic impact

Returned $40 for every $1 invested by FCT

Notes on methodology:

Exchange rates use historical averages by year from: https://www.oanda.com/currency/average

2016 rate: €1.00 = $1.11

Wage impact follows the multiplier methodology of “High-Tech Employment and Wages in the United States” (Bay Area Council Economic Institute, 2012), which found that each new tech job results in the indirect creation of 4.3 non-tech jobs, of which 2.0 are high-paying professional jobs and 2.3 are low-paying non-professional jobs.

The calculation here uses the following inputs:

- High wage in Portugal: $46,750
- Low wage in Portugal: $23,375
- Overhead rate: 70%
### GLOBAL STARTUP PROGRAM: Portfolio of Portuguese technology-based companies accepted

<table>
<thead>
<tr>
<th>#</th>
<th>Company</th>
<th>Location</th>
<th>Contact TTO/Incubator</th>
<th>Area</th>
<th>Opportunity Description</th>
<th>Cohort</th>
<th>Funding*</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Feedzai</td>
<td>Coimbra</td>
<td>IPN</td>
<td>ICT</td>
<td>Seamless integration of real-time data and historical information, producing high value analytics.</td>
<td>2011-2012</td>
<td>$26M</td>
</tr>
<tr>
<td>2</td>
<td>Inovapotek</td>
<td>Porto</td>
<td>UPTEC</td>
<td>Bio</td>
<td>Consulting, research and development for the pharmaceutical and cosmetics industries.</td>
<td>2011-2012</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Technophage</td>
<td>Lisbon</td>
<td>IMM</td>
<td>Bio</td>
<td>A multiplatform biotech company involved in the R&amp;D of new molecules in diverse therapeutic areas.</td>
<td>2011-2012</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Tecla Colorida</td>
<td>Porto</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Official school web spaces for collaboration, communication and sharing between students, parents, and teachers.</td>
<td>2011-2012</td>
<td>$40K</td>
</tr>
<tr>
<td>5</td>
<td>WS Energia</td>
<td>Lisbon</td>
<td>Tagus Parque</td>
<td>Clean Tech</td>
<td>Solar trackers that keep solar photovoltaic (PV) panels best oriented toward the sun.</td>
<td>2011-2012</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Bicalvo</td>
<td>Lisbon</td>
<td>FCL</td>
<td>Life Sciences</td>
<td>Marine ingredients for cosmetic and pharmaceutical applications.</td>
<td>2011-2012</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Omniflow</td>
<td>Porto</td>
<td>NET</td>
<td>Clean Tech</td>
<td>Small wind energy generation and lighting.</td>
<td>2013-2014</td>
<td>$553K</td>
</tr>
<tr>
<td>8</td>
<td>Celfinet</td>
<td>Lisbon</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Technical consultancy services and solutions to the telecom players.</td>
<td>2013-2016</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Tuizzi</td>
<td>Porto</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Web platform that simplifies and facilitates the access to buy, sell, and manage outdoor advertising.</td>
<td>2013-2014</td>
<td>$586K</td>
</tr>
<tr>
<td>11</td>
<td>Jscrambler</td>
<td>Porto</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Web security company focused on developing solutions to protect web applications.</td>
<td>2013-2014</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>LiveFabric</td>
<td>Guimarães</td>
<td>Spinpark</td>
<td>Other</td>
<td>Compression therapy garment.</td>
<td>2013-2014</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>TakeTheWind</td>
<td>Coimbra</td>
<td>IPN</td>
<td>Other</td>
<td>Medical simulator.</td>
<td>2014-2015</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Metablue</td>
<td>Porto</td>
<td>UPTEC</td>
<td>Life Sciences</td>
<td>Ear infection monitoring and diagnosis.</td>
<td>2014-2015</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>ARPublisher</td>
<td>Porto</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Books with 3D contents and augmented reality.</td>
<td>2014-2015</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>2East</td>
<td>Cascais</td>
<td>[none]</td>
<td>Other</td>
<td>Backpack system to sell beverages at events.</td>
<td>2014-2015</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Whale</td>
<td>Covilhã</td>
<td>Parkurbis</td>
<td>ICT</td>
<td>Social CRM called &quot;SONAR&quot;.</td>
<td>2014-2015</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Line Health</td>
<td>Lisbon</td>
<td>Beta-i</td>
<td>Life Sciences</td>
<td>Bluetooth pill bottle for medical adherence.</td>
<td>2015-2016</td>
<td>$1M</td>
</tr>
<tr>
<td>23</td>
<td>BioPremier</td>
<td>Lisbon</td>
<td>TecLabs</td>
<td>Life Sciences</td>
<td>Food safety and fraud detection/testing.</td>
<td>2015-2016</td>
<td></td>
</tr>
<tr>
<td>#</td>
<td>Company</td>
<td>Location</td>
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<tr>
<td>24</td>
<td>Dognaedis</td>
<td>Coimbra</td>
<td>IPN</td>
<td>ICT</td>
<td>Information security technology.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>25</td>
<td>EyeSee Solutions</td>
<td>Lisbon</td>
<td>[none]</td>
<td>ICT/Digital Media</td>
<td>Embedded advertising technology for video.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>26</td>
<td>Veniam</td>
<td>Porto/Aveiro</td>
<td>UPTEC/EUCA</td>
<td>ICT</td>
<td>Mesh network for internet.</td>
<td>2015-2016</td>
<td>$27M</td>
</tr>
<tr>
<td>27</td>
<td>Bliss Applications</td>
<td>Lisbon</td>
<td>Portugal Ventures Accelerator</td>
<td>ICT</td>
<td>Mobile software development consultancy</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>28</td>
<td>Xhockware</td>
<td>Porto</td>
<td>UPTEC</td>
<td>ICT</td>
<td>Solution to end queues at checkout in supermarkets.</td>
<td>2015-2016</td>
<td>$4M</td>
</tr>
<tr>
<td>29</td>
<td>BeMicro</td>
<td>Lisbon</td>
<td>EDP</td>
<td>Clean Tech</td>
<td>OEM manufacturer of micro inverters for residential solar.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>30</td>
<td>BEEVERYCREATIVE</td>
<td>Aveiro</td>
<td>IEUA</td>
<td>Other</td>
<td>Desktop 3D printer developer.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>31</td>
<td>Ciengis</td>
<td>Coimbra</td>
<td>IPN</td>
<td>Other - Process Industries</td>
<td>Performance monitoring, optimization, and nonlinear model predictive control solutions for industry</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>32</td>
<td>CoolFarm</td>
<td>Coimbra</td>
<td>IPN</td>
<td>Agro</td>
<td>Sensors and controllers for hydroponics and greenhouses.</td>
<td>2015-2016</td>
<td>$1M</td>
</tr>
<tr>
<td>33</td>
<td>doDOC</td>
<td>Coimbra</td>
<td>IPN</td>
<td>ICT</td>
<td>Digital document management for drug and pharma filings and compliance.</td>
<td>2015-2016</td>
<td>$520K</td>
</tr>
<tr>
<td>34</td>
<td>Peekmed</td>
<td>Braga</td>
<td>Startup Braga</td>
<td>Biotech</td>
<td>3D surgical planning software for orthopedic surgeons.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>35</td>
<td>Petable</td>
<td>Lisbon</td>
<td>Beta-i</td>
<td>ICT/Life Science</td>
<td>Veterinarian mobile app.</td>
<td>2015-2016</td>
<td>$769K</td>
</tr>
<tr>
<td>36</td>
<td>Switch</td>
<td>Matosinhos</td>
<td>[none]</td>
<td>ICT</td>
<td>Online payments gateway.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>37</td>
<td>SWORD Health</td>
<td>Porto</td>
<td>Startup Braga</td>
<td>Biotech</td>
<td>Delivery and monitoring solution for rehabilitation of stroke patients.</td>
<td>2015-2016</td>
<td>$2M</td>
</tr>
<tr>
<td>38</td>
<td>Watt-IS</td>
<td>Lisbon</td>
<td>Taguspark</td>
<td>Clean Tech</td>
<td>Energy efficiency solution in multi-platform environment for utility companies.</td>
<td>2015-2016</td>
<td>-</td>
</tr>
<tr>
<td>39</td>
<td>Findster</td>
<td>Porto</td>
<td>Startup Braga</td>
<td>ICT</td>
<td>Tracker tag with proprietary RF technology.</td>
<td>2015-2016</td>
<td>$162K</td>
</tr>
<tr>
<td>40</td>
<td>CrowdProcess (James)</td>
<td>Lisbon</td>
<td>Startup Lisboa</td>
<td>Fintech</td>
<td>Software for credit risk modeling based on machine learning.</td>
<td>2016-2017</td>
<td>-</td>
</tr>
<tr>
<td>41</td>
<td>Loqr</td>
<td>Braga</td>
<td>Startup Braga</td>
<td>Cyber Security</td>
<td>Authentication service platform that preemptively avoids fraud in financial transactions.</td>
<td>2016-2017</td>
<td>-</td>
</tr>
<tr>
<td>42</td>
<td>Shelf.AI</td>
<td>Porto</td>
<td></td>
<td>ICT/Software</td>
<td>Artificial intelligence e-commerce smartphone software that creates shopping lists resulting in higher sales to retailers.</td>
<td>2016-2017</td>
<td>-</td>
</tr>
<tr>
<td>43</td>
<td>Perceive3D</td>
<td>Coimbra</td>
<td>IPN</td>
<td>Software/Healthcare</td>
<td>Software application that processes endoscopic video in real-time to provide unique image enhancement features to assist surgeries.</td>
<td>2016-2017</td>
<td>$574K</td>
</tr>
<tr>
<td>44</td>
<td>LaserLeap</td>
<td>Coimbra</td>
<td>IPN</td>
<td>Hardware/Healthcare</td>
<td>Painless method of delivering formulations and drugs through the skin to promote faster, more effective treatments.</td>
<td>2016-2017</td>
<td>-</td>
</tr>
<tr>
<td>45</td>
<td>Sphere</td>
<td>UPTEC</td>
<td>Hardware</td>
<td>Ultrafast pulsed laser systems with high performance measurement and control for optimal quality and precision.</td>
<td>2016-2017</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

* Source: Crunchbase (does not include undisclosed funding amounts).
2011-present: Global Startup Program, fostering Portuguese technology companies to go global

**Company Cohort**

|----------|-----------|-----------|-----------|-----------|-----------|

| Companies accepted | 6 | 7 | 9 | 18 | 6 |
| Applications       | N/A | 28 | 41 | 34 | 36 |

29% average acceptance rate of companies to program
Main partner institutions in the Portuguese entrepreneurial ecosystem
2. Why The University of Texas at Austin?

“...There are several successful entrepreneurial programs going on at UT. We are adding an international flavor. We bring foreign entrepreneurs with the best creative technologies to Austin and help them grow globally for the benefit of society.”

Marco Bravo, Co-Principal Investigator and Executive Director, UT Austin|Portugal
2. Why The University of Texas at Austin?

With a Gross State Product (GSP) of $1.6 trillion and a five-year GSP growth rate of 3.4%, Texas consistently ranks as one of the country’s most favorable business climates due to its low tax burden and competitive regulatory environment. In Texas, aggregate costs for real estate, energy, wages and taxes are lower than those in the majority of US states.

Texas has one of the lowest state and local tax burdens in the nation, featuring no personal income tax. Overall, the state ranks 42nd among the 50 states in taxes paid per $1,000 of personal income. Texas consistently is one of the best states for business in numerous rankings. In terms of tech M&A and IPOs per state, Texas ranks 4th in the country.1

Being the state capital of Texas, Austin was ranked by Forbes in 2014 as the third best city to start a business in the United States. Compared to other major business hubs, Austin is renowned for its high quality of life and affordability. The Council for Community & Economic Research states that living costs in Austin were 6-7% below the national average in 2013. The Austin area was named the “Most Business-Friendly US City” by the Kauffman Foundation in 2013. CNN Under30CEO ranked Austin number 1 on the top 30 best cities for young entrepreneurs and the best place to start a company based on key business metrics in 2013. In 2015 Austin was considered the number 1 best large city to live in by Wallethub. Compass also named Austin the fastest emerging Global Startup Ecosystem.

In Austin one finds a thriving business base that includes enterprises in technology, digital media, clean energy, life sciences, advanced manufacturing, and data centers. Its a dynamic business ecosystem that has provided consistent growth for some of the world’s most successful companies, including Dell, Whole Foods, Freescale, Facebook, eBay, PayPal, GM, Samsung, and more. Austin places at the top of fDi Intelligence’s annual “American Cities of the Future” ranking, as well as Area Development’s “Leading Locations.”

Forbes calls Austin “America’s No. 1 Boom Town.” Austin tops the list of hot US cities that offer both jobs and culture according to US News in July 2013. These evaluations are based on performance and on the criteria that businesses use for making location decisions - like workforce quality, capacity for innovation, low cost of doing business, and the quality of life that Central Texas affords. In January 2016, Forbes ranked Austin number 1 in its list of “America’s Cities of the Future.”8

The University of Texas at Austin is a major research university, home to more than 51,000 students, 3,000 faculty, and 20,000 staff. The university has more than 90 research units, 5,500 funded research projects, and annual research funding exceeding $650 million. In the past ten years university research yielded 739 patents, the university received $140 million in licensing revenues, and UT Austin entrepreneurs founded 66 companies. Annually ranked among the best US public research universities, many of its colleges, schools, and departments are considered among the finest in the nation. The Times of London, in a 2004 survey of colleges and universities around the world, ranked The University of Texas at Austin as number 15 worldwide. UT Austin is the flagship university of the University of Texas System, which includes eight universities and six health science centers. The University of Texas System conducts over $2.6 billion in sponsored research annually.

10. https://research.utexas.edu/about/reports-on-research/
3. Activities, performance metrics, and results

“I would definitely recommend the UTEN program to all Portuguese startups that want to enter the US market. Having a team that can act as your advance team on the ground helping you with your go-to-market, pricing and marketing strategies, that can help you set goals, and that can also help you with a soft landing in terms of legal requirements and office space can truly make a difference between succeeding and failing. Odds are always against you when you are a startup, and having a brilliant team like the guys at UTEN helping you out can level the playing field a little bit.”

Bruno Farinha, CEO Petable
3.1. Global Startup Program

UTEN aims to provide Portugal with a comprehensive strategy to see its investments in S&T yield fruit in terms of economic expansion and growth through the support and outreach of entrepreneurial enterprises. In other words, UTEN’s mission is to bring technologies from Portuguese laboratories to international markets and thus provide a return on the national investments in Portugal’s university science and technology systems.

UTEN has been thoughtfully fitted to Portugal’s needs so that it accurately addresses the challenge to grow the nation’s economy and in-country wealth through the international exploitation of its S&T investment, and more fully realize its remarkable potential on the immediate horizon. It is widely recognized that scientific progress is a source of economic development. Public resources invested under rigorous international assessment policies lead to new knowledge, advance training of new human resources for society, and encourage new ideas and processes that increasingly result in innovation, modernization of institutions, improved quality of life, economic productivity, and wider employment. In pursuit of stable economic development, the nation of Portugal has made aggressive investments to deepen its scientific capacities. The results of these investments have been transformative and provide (more than hope) new opportunity in the face of manifest political and economic crises.

The program has been promoting activities of international business acceleration to help Portuguese early-stage S&T startup companies expand to international markets including the United States through the Global Startup Program (GSP).

The Global Startup Program assists Portuguese entrepreneurial endeavors in different phases of development:

1. Early-stage commercialization projects are led by researchers or entrepreneurs and may lead to a new spinoff company. This market initiative targets early-stage entrepreneurial projects with a promising technology in early development, which is often the case with entrepreneurially-minded researchers. For endeavors of this type led by Portuguese researchers, the UT Austin team prepares the entrepreneurs for global markets through proactive business development. The team works extensively with the most promising Portuguese entrepreneurs for eight to twelve months to have a successful market launch, not only in the United States but also in the other regions where the university is active. The UT Austin team provides the following proactive international business development activities for selected technologies:
   - Research into potential international business engagements for the technologies.
   - Planning a research-based strategic approach to develop new business.

2. Early-stage start-up ventures are typically based on a technology that is within a development phase close to the market. The UT Austin team partners with the local organizers of the most relevant business plan competitions in Portugal to provide business development services to finalist and winning projects that prove, through a thorough assessment, to be ready for internationalization.

3. Mature technology ventures with sales records are ready for the transition to global markets and are seeking business deals in the United States. This program builds on the experience of US Connect that produced excellent results for Portuguese start-ups such as Feedzai, Veniam, Take The Wind, Omniflow, and Biopremier, among others, in terms of business development, incubation, and closure of deals. Particular focus is placed on Portuguese ventures that have demonstrated success in the domestic (Portuguese) market but have yet to expand into global markets. It emphasizes Portuguese ventures with products, revenue, and the capacity to support travel and business development in the United States.

The most common GSP candidates in Portugal are the ones of type “2” above, and experience shows that there are significant differences among the market approaches in Portugal, Europe, and the United States, forcing all ventures to develop a unique strategy for entering the American market, which is highly competitive and thus requires dedicated human and financial resources.

The UTEN team focuses on two distinct types of technology ventures: early-stage start-up ventures and relatively mature technology ventures. The former need assistance with basic business development issues whereas the later need assistance accelerating their businesses.

2. Early-stage start-up ventures are typically based on a technology that is within a development phase close to the market. The UT Austin team partners with the local organizers of the most relevant business plan competitions in Portugal to provide business development services to finalist and winning projects that prove, through a thorough assessment, to be ready for internationalization.

3. Mature technology ventures with sales records are ready for the transition to global markets and are seeking business deals in the United States. This program builds on the experience of US Connect that produced excellent results for Portuguese start-ups such as Feedzai, Veniam, Take The Wind, Omniflow, and Biopremier, among others, in terms of business development, incubation, and closure of deals. Particular focus is placed on Portuguese ventures that have demonstrated success in the domestic (Portuguese) market but have yet to expand into global markets. It emphasizes Portuguese ventures with products, revenue, and the capacity to support travel and business development in the United States.

The most common GSP candidates in Portugal are the ones of type “2” above, and experience shows that there are significant differences among the market approaches in Portugal, Europe, and the United States, forcing all ventures to develop a unique strategy for entering the American market, which is highly competitive and thus requires dedicated human and financial resources.
3.1.1 Activities with 2015-2016 companies

During the first half of 2016, the Global Startup Program focused primarily on the 2015-2016 cohort of companies, in addition to follow-up activities with 2011-2015 companies and preparation for the 2016 call. The 2015-2016 cohort consisted of 18 companies divided into two groups, “business development companies” and “acceleration companies,” based on their phase of development and the type of assistance they most needed in order to go global.

Orientation week

In February 2016, the UTEN team hosted a week of orientation in Austin for ten companies in the acceleration group: BEEVERYCREATIVE, BeMicro, Ciengis, CoolFarm, doDoc, Findster, PeekMed, Petable, SWORD Health, and Watt-IS. These ventures spanned the cleantech, data analytics, industrial applications, eCommerce B2C, and healthcare industry sectors. (UTEN had previously conducted an orientation for companies in the business development group in November 2015.)

Orientation week opened with a focus on developing and refining 10-minute business pitches and articulating the companies' value propositions, first with the UTEN team and then at a “Success Committee Mastermind” event with more than 30 mentors. The highlight of the week was an Austin startup community immersion event at the Capital Factory, where the entrepreneurs pitched their products and services to an Austin audience of more than 50 regional technology leaders.

The week concluded with guided follow-up discussions that were initiated in the immersion event. Tangible results of the week included the following:

- CoolFarm entered negotiations with a Texas company for a potential pilot project.
- Petable began discussing a trial project with a local veterinarian clinic, as well as adding new features to its platform.
- Findster sold three product units and initiated a trial with a local business for feedback.
- SWORD Health secured an oral commitment for a pilot project, began negotiation of a business agreement with a leading Austin hospital, and had meetings with several orthopedics and clinic directors.
- PeekMed had multiple meetings with orthopedic customers and began exploring a pilot project.
- BeMicro had one-on-one engagements with business people in the solar power industry and system integrators, and scheduled a meeting with a potential US distributor.

Read CoolFarm’s report on its experience at: http://tinyurl.com/utencf.

3.1.2. Company Cohort of 2015-16

- 2015 Business Development Companies

**Biopremier**

http://biopremier.com/

Led by Pedro Antunes, Biopremier develops DNA-based diagnostic solutions for several sectors, including agro-food, veterinary, environmental, and clinical. The company has developed techniques that are unique in the world, both in service and product format — speciation, fraud detection, and DNA-based microbiology. The company began the monetization efforts for product and service development in 2012, starting with food quality and fraud control within the Portuguese market. Today the company works with clients all over the EU and is starting to internationalize beyond its borders (US, Brazil, and Mexico, for example). Biopremier’s services and products are used mainly in the agro-food sector, from private firms (retailers, producers, and laboratories) to governmental fraud control agencies. The company’s competitive advantage is its unique technology for food-fraud detection through DNA, as well as a lean cost structure. Biopremier aims to be an international reference of innovation and development for molecular diagnosis of products by becoming a molecular biology center of reference. The company is focused on innovation, offering products and services in the fields of molecular biology for the agrifood, environmental, human clinical, and animal health industries.

**Bliss**

www.blissapplications.com

Bliss Applications is a mobile software development consultancy developing services and products for a growing market of mobile-driven economies as a subsidiary for WYgroup. WYGroup started in 2002 as a digital marketing agency. The company evolved into a group in 2007 by capturing new technologies that could be used for marketing, which led to the creation of Bliss Applications in 2009, with a focus on developing software and apps for what was thought to be a great market. From its inception the group maintained the same management board and the same leadership in the mobile consultancy business unit. Pedro Janela is CEO of WYgroup and André Gil is Managing Partner of Bliss Applications.
Focused on information security, Dognædis was created by a team of researchers from CERT-IPN and University of Coimbra. Francisco Rente and team previously created CSIRT (Computer Security Incident Response Team). CERT-IPN, hosted at the Instituto Pedro Nunes, is a technology transfer interface created by the University of Coimbra in Portugal. After five years of activity, and due to the increasing success and positive feedback from several private and government organizations, Dognædis started as a private company, aiming to be at the forefront of security technologies. To reach this goal, the company is devoted to bringing information security to organizations and individuals through excellence in innovative solutions.

Headquartered in Lisbon, Portugal, and led by André Pimentel and João Redol, EyeSee is a revolutionary solution that engages viewers and allows brands to seamlessly integrate in-stream ads and in-image ads in premium content. EyeSee has developed a patent-protected technology that automatically inserts context-relevant ads: No need for human intervention, making it easy and scalable for publishers.

Formerly PharmAssistant, Line Health has undergone a major rebranding and product design. Strongly influenced by the extensive market research conducted by the IC² Institute, consisting of many conversations with persons in the healthcare industry, Line Health made the decision to focus on engagement and alignment between healthcare providers and patients. The company’s initiative to redesign its product, in order to offer a higher degree of confirmation to patients and caregivers, was underscored by conversations with Cindy Walker-Peach, Director of the Life Science vertical at the Austin Technology Incubator and Anupam Srivastava, Director of Intel Capital.

On the company’s behalf, in order to determine the right market fit for its solution, the UTEN Team was able to facilitate a clinical pilot dialogue for 100 stroke patients with the NeuroTexas Institute at St. David’s Hospital. For the trial, the Institute helped Line Health identify potential funding sources and collaborated on NIH and American Heart Association grants. As a part of conversations for this trial, Line Health began discussions to form an industry partnership with Dell company and start clinical trial conversations for diabetic patients with Sendero Health, a major Accountable Care Organization in Texas.

The value brought by the IC² Institute and the UTEN program to Line Health is unquestionable. They did an impressive job in terms of market research, and they were able to arrange very important and relevant meetings for my trips to Texas (investors, partners, pilots, etc.). The ongoing relationship was also critical for the development of our business model in the US, figuring out the incentives for each stakeholder.

Diogo Ortega, co-founder and CEO of Line Health

UTEN brings American startup know-how to the Portuguese ecosystem. They teach us best practices and methods, without which we couldn’t aim at becoming successful entrepreneurs.

Lourenço Oliveira, Business Developer for Line Health

Veniam is building the Internet of Moving Things. It turns vehicles into Wi-Fi hotspots and builds city-scale vehicular networks that expand wireless coverage and collects terabytes of urban data. In controlled spaces such as ports and container terminals, Veniam’s game-changing solutions ensure that all mobile workers and assets are securely connected, no matter where they are or at what speed they are moving. Its hardware, software, and cloud components are running in the world’s largest network of connected vehicles, including taxis, waste collection trucks, and an entire public bus fleet in Porto, Portugal, offering free Wi-Fi to more than 260,000 active customers. Veniam is backed by leading capital venture firms, with offices in Silicon Valley and Porto, Portugal.
XHOCKWARE
http://www.xhockware.com/

Led by João Rodrigues, CEO, and João Neiva, COO, Xhockware is a tech company based in Porto focused on developing innovative retail solutions. The company’s first product is YouBeep, a mobile checkout solution designed to end waiting lines at checkout. The solution is based on two components, a mobile app and patented pluggable device, compatible with all POS, requiring no integration. YouBeep is a product for retailers worldwide, especially grocers and supermarkets wanting to improve customer satisfaction and save money.

BEEVERYCREATIVE

BEEVERYCREATIVE, led by Aurora Batista, develops desktop 3D printers and sells those printers and filament. The company aims to be among the world’s top players in this market within five years. In 2013, the company launched its first printer, BEETHEFIRST, which is certified with CE, GS and UL, and has been distinguished in 2014 with four relevant international awards. In the same year, CNN Money referred to BEEVERYCREATIVE as one of the four companies in the race for the consumer market, and Tech.Eu ranked the company as the #21 most exciting lean hardware startup in Europe.

Ciengis
http://www.ciengis.com/

Ciengis was founded in 2006 as a spin-off of the University of Coimbra by CEO Andrey Romanenko and Natércia Fernandes. Ciengis provides monitoring and optimization solutions that help manufacturing companies optimize the efficiency of their processes and reach higher levels of performance and competitiveness. Ciengis has worked with manufacturers in a variety of industries including chemical, petrochemical, energy (including bioenergy), cement, pulp and paper, and other manufacturing plants that have high energy consumption and high non-conformance costs. Solutions address all phases of a project: model development, control system architecture development, interfacing with regulatory controls, tuning, commissioning, and testing.

BeMicro
http://www.beonenergy.com/

Founded in 2015 by Rui Rodrigues and José Marcal, BeMicro operates mainly in Smart Energy. BeMicro’s main product is the BEON microinverter, a small device that is attached to a solar panel and allows it to be directly connected to a wall socket plug to start producing energy right out of the box and within 30 minutes. The company has introduced a unique system that allows the microinverters to be controlled to guarantee excess production. To help customers save money, the system is also able to control consumption and disconnect devices if the energy production from renewable sources is insufficient.

doDOC
http://www.dodoc.com/

doDOC was co-founded by three MIT Portugal PhDs: Carlos Boto, Federico Cismondi, and Paulo Melo, who together share more than 35 years of experience in professional documentation, engineering systems and life sciences, business development and sales. doDOC is defining a new era in regulatory compliance. doDOC automates the
creation, management, and tracking of information for regulatory reports, ensuring compliance and facilitating the steps required for regulatory and quality audits. Through a cloud-based Platform-as-a-Service, doDOC can replace, complement, or enhance existing document management solutions due to its compatibility, flexibility, and highly collaboration-oriented platform. Moreover, the management of the whole compliance process significantly improves due to the integrated analytics that doDOC provides.

Findster has developed an innovative GPS tracking system that uses a proprietary radio frequency (RF) technology to extend the communications range 10-20X times further than the typical Bluetooth-enabled tracking systems on the market today. Findster trackers have a standard range of 1km (0.62mi) versus a typical 100-150 meter range of Bluetooth trackers, that can be extended to 2km (1.2mi) with addition of a base station to the system. The Findster tracker is ideal for real-time monitoring of the location of children or pets at play or going to school. When paired with the Findster mobile app, security zones or routes can be created that receive push notifications when the safe settings are not met. Additional features include activity tracking and fall detection. Findster tracker has no monthly fees.

Findster
https://www.getfindster.com/

Findster has developed an innovative GPS tracking system that uses a proprietary radio frequency (RF) technology to extend the communications range 10-20X times further than the typical Bluetooth-enabled tracking systems on the market today. Findster trackers have a standard range of 1km (0.62mi) versus a typical 100-150 meter range of Bluetooth trackers, that can be extended to 2km (1.2mi) with addition of a base station to the system. The Findster tracker is ideal for real-time monitoring of the location of children or pets at play or going to school. When paired with the Findster mobile app, security zones or routes can be created that receive push notifications when the safe settings are not met. Additional features include activity tracking and fall detection. Findster tracker has no monthly fees.

 PeekMed
http://www.peekmed.com/

PeekMed started in 2014, and the company was founded in January of 2015 by João Pedro Ribeiro, Sara Silva, and Jamie Campos. PeekMed aims to achieve the forefront of innovation through the creation of products that redefine services in healthcare. The company strives to build, on the one hand, innovative and powerful technological solutions, and on the other hand, simple and easy to use tools in order to help the healthcare professional in a better way. PeekMed intends to create global products that are easily accessible, used, and recommended by physicians worldwide. PeekMed's first product is a 3D surgical planning software for orthopedic surgeons, PeekMed One. Current pre-operative planning tools are ineffective because orthopedic surgeons cannot make a full surgery preview due to the current 2D limitations of the planning process. During 2014, PeekMed tested the prototype version of PeekMed One with a community of about 30 orthopedic surgeons in the north of Portugal. Through an iterative process, it has worked to reach a high
quality industry-leading tool. PeekMed recently launched its minimum viable product (MVP). Since February, there are about 80 users of the trial version of PeekMed One. PeekMed’s patent-pending technology consists of an algorithm that allows the interoperability of images structurally different.

PETABLE

Petable
http://www.petable.care/

Founded by Ines Viegas and Bruno Farinha, Petable is an app for pet owners that includes a pet’s complete and detailed health and life records, contextualized information from Petable’s team of vets with a direct connection to the user’s veterinarian, and integration with wearable and IoT devices for pets.

The company also includes a back office for veterinary clinics, with integration to practice management software, and that means access to clients’ remote behavior, and a platform for guided pet care. Petable is also a platform for corporate players, who benefit from the collected data, and get a channel for delivering contextualized information.

SWITCH

https://switchpayments.com

Founded by Pedro Campos and Ruca Marques, SWITCH is an online payments gateway that provides one simple and flexible API that connects high volume merchants with a myriad of service providers (Card Networks, Acquirers, Processors, PSPs, Wallets, Security Providers) over a single integration using proprietary technology such as dynamic routing to promote cross-border transaction optimization. Switch offers flexible payment APIs with libraries in every mainstream programming language that enable businesses to easily integrate multiple acquirers/currencies/payment methods over one single integration; significantly reduce their processing rates on cross-border payments by dynamically routing transactions through local acquirers; create custom payment experiences in mobile websites or mobile apps; program flexible payment orders charge customers one-time, recurring, with dynamic amounts and periods; and keep sensitive data away from their servers, easing much of the Payment Card Industry Data Security Standard (PCI DSS) compliance burden. The company’s state-of-the-art modular systems architecture enables IT to plug multiple payment providers in record time. This infrastructure combined with a transactional business model allows SWITCH to rapidly expand its operations into other markets and acquire new businesses using first-mover advantage to explore new markets.

SWORD HEALTH

http://swordhealth.com/web/

Founded by Virgílio Bento and André Eiras dos Santos, SWORD Health believes that the solution for stroke rehabilitation is in the wise combination of novel neuroscience-driven therapeutic methods with effective technologies that facilitate the dissemination of care and the use of all the
knowledge produced in the rehabilitation of a large network of patients. Pursuing this vision, the company has developed an innovative system that allows the sustainable delivery of a more efficient motor rehabilitation to stroke patients, providing a rich source of data for clinicians and decision makers. SWORD Health was selected as one of the 140 most innovative companies in Europe and won a grant of $1M with the project. In addition, the company is partnering with the biggest rehabilitation chain in the United States (2,100 clinics).

WATT-IS
https://watt-is.com/

Watt-IS was founded in March, 2012 by three entrepreneurs, with Miguel Carvalho as CEO. With diverse backgrounds, the team has been working jointly for more than four years on several R&D projects in energy efficiency within the MIT Portugal Program (MPP). Watt-IS was recently strengthened by the addition of Henrique Pombeiro (an MPP PhD candidate) as partner. Watt-IS has developed a software solution that analyzes the aggregated electricity consumption of a household from the data provided by smart meters, to identify when and which household appliances are used in a non-intrusive way. With this information, Watt-IS is able to generate tailor-made energy efficiency measures targeted for each household to help end-user clients use electricity more efficiently, thus lowering energy consumption (and bills). The new layer of information generated will be useful to utility companies to better understand their clients, improve customer satisfaction levels, and achieve proper client segmentation. Watt-IS intends to partner with energy companies to provide precise energy efficiency information to their existing client base, charging utility companies an annual fee.

The program is really well organized and occupies a space that you do not often see occupied by accelerators focusing on the commercialization stage. Typically an issue with startups is the capability to access the markets and you try to provide exactly that, so the value added is terrific.

Miguel Carvalho, CEO Watt-IS

3.1.3 Success stories

BEEVERYCREATIVE
https://beeverycreative.com/

BEEVERYCREATIVE manufactures and markets 3D printers designed and made in Portugal. In 2015 it applied to the UTEN call and was accepted into the program as an ongoing enterprise. As a maturing business the company had come to realize that market entry into countries outside Portugal, the US in particular, would be needed to provide demand volumes necessary to achieve profitability through scale. Simply put, globalization was a imperative for viability, not market research and analysis, capped by face-to-face time with the BEEVERYCREATIVE leadership team and prospective market stakeholders.

This intensive UTEN engagement process produced a number of market-validated observations, namely;

1. There are a number of market segments/categories, including fabrication, production additive manufacturing, and volume 3D printing where the company’s current products did not have a strong market fit due to features/pricing/duty cycles.

2. The “maker” market offered some promise for the company’s DIY models but competition is intense and a number of channels are already dominated by a few brands. Pursuit of this market segment would require sizeable marketing investment.

3. The much anticipated consumer market has not yet materialized and may never happen, although Mattel’s decision to enter the market with a vast “content” inventory may break the code.

4. The company’s most differentiated features appeared to have a strong market fit with the education segment, STEM in particular.

Based on these observations the UTEN team pointed out that pursuing a differentiated strategy for the education segment was “directionally” aligned with company objectives and market fit. UTEN recommended that the company pursue this option. The UTEN team then worked with the company’s executives, using information gleaned from its market findings, to develop a go-to-market strategy and roadmap for creating a market position in the educational vertical by
“embedding” the 3D print device in a larger curriculum-based solution.

While the company concurred with this conclusion, product regulatory delays prevented this strategy from being executed in the US. This strategy was however executed in the broader European market and is gaining traction in the education segment, where there is a market for 3D hardware products embedded in learning programs.

The company, having resolved product certification issues, will re-engage with UTEN in 2017 to re-visit the US strategy and go-to-market plan.

You guys are a hell of a team. You are really dedicated.
Aurora Baptista, CEO BEEVERYCREATIVE

BioPremier

http://biopremier.com/

BioPremier develops DNA-based diagnostic solutions for several market sectors including agro-food, veterinary, environmental and clinical testing. Its primary market is the agro-food sector, testing for product authenticity for fraud detection and speciation, and quality control using “next generation sequencing” (NGS) technology though its in-house service laboratory. The company began offering this service in 2012 and has developed a growing market base in Portugal and Europe. BioPremier has also established a non-exclusive partnership to offer its NGS testing service through SGS Inc., a world leading certification and testing company. In addition to its service business, BioPremier sought to expand its market in the US and to offer its NGS testing platform for sale to the market.

Together the UTEN team and BioPremier discussed what go-to-market strategy might be deployed to gain market traction for its service business, and to find a marketing partner for its platform to address the direct market. The findings were:

1. BioPremier did not have the financial capacity to open a service lab in the US, thus any customers acquired would need to ship their samples to Portugal for NGS testing. This would not be a major barrier to market entry.

2. BioPremier was concerned that other larger food testing organizations would enter the market to compete in the NGS test market.

3. The NGS test platform is run on third-party DNA sequencers manufactured by Thermo Fisher Scientific, and could be run on equipment from other vendors.

After this review the UTEN team introduced BioPremier to the Food Safety/Molecular Life Science team at Thermo Fisher Scientific, which led to negotiations for an OEM manufacturing and sales partnership with Thermo. At the same time, BioPremier began validation of the NGS platform on Illumina DNA sequencers as a backup to Thermo. The UTEN team recommended that BioPremier undertake discussions with SGS about further strengthening the relationship through an exclusive partnership and/or acquisition as a way to maintain a market leadership position versus future competition.

BioPremier pursued this three-pronged strategy throughout 2016 in frequent consultation with UTEN as it progressed. In August SGS entered into discussions to acquire BioPremier.

One of the things that was very unexpected about the UTEN team was the fact that it had a person who understood quite a lot about our technical area. The program is very, very valuable especially for companies that want to have a global market or a global partner.

Pedro Antunes, CEO BioPremier
Celfinet
http://www.celfinet.com/

Celfinet, created in 2003, focuses on technical consultancy services and solutions for telecommunications companies. Its primary product, Vismon Intelligence, is a Multivendor Network Performance Manager based on BSS counters that is tailored to GSM/DCS, UMTS and LTE technologies. It statistically monitors information collected directly from the main network elements, and enables close inspection of the major QoS offenders, identifying network trouble spots and setting up and implementing correction measures.

Celfinet joined the UTEN program in the 2013-2014 cohort. Its initial work with UTEN led to a decision to focus on its Portugal and UK markets and the maturation of its Vismon product before making a large entry into the US.

In 2016 Celfinet acquired a novel power-related technology from which it developed a hardware product, the RAN Energy Optimizer, which it felt would create new opportunities to sell to wireless operators. Following its release, Celfinet spent a number of weeks in Austin with the UTEN team restructuring and redesigning its product packaging, doing competitive analysis, undertaking customer discovery work specific to wireless carrier equipment towers (owners/operators), and better understanding the buying cycles and purchasing processes of their customers.

With this shift in product focus, UTEN identified a number of telecom industry events where Celfinet could solicit US prospects and promote its new hardware solution. Celfinet and members of the UTEN team attended trade shows in Las Vegas and Austin where Celfinet was able to exhibit its product for the first time and gained valuable market insights into how prospective customers might value its offering.

UTEN introduced Celfinet to an Austin-based telecom equipment services company that found Celfinet’s Vismon middleware solution to be of high interest. This company also has continued holding strategic business discussions with Celfinet to help it with the electrical standards testing and certification of the RAN Energy Optimizer.

Additionally, Celfinet asked for UTEN’s help to enhance its IP/patent portfolio strategy. UTEN provided referrals to IP attorneys at three US law firms. Celfinet selected a leading firm with offices in Austin as its IP counsel.

UTEN has also opened doors to possible growth strategies for Celfinet. Following an introduction by UTEN, the executive team is in the process of preliminary talks with an EU-based private equity firm that provides growth capital to companies of its size. UTEN also introduced Celfinet to a North American M&A firm to open exploratory discussions on potential suitors, should Celfinet have an interest in undertaking this option.

CoolFarm
https://www.cool-farm.com/

CoolFarm applied to the 2015-2016 cohort for business development efforts and was accepted for acceleration efforts as the company was not yet prepared to launch its product. CoolFarm has developed a breakthrough intelligent greenhouse control software system that makes it easy to control the environment of the greenhouse for optimal plant growth, energy use and human resource management. Unlike traditional greenhouse control systems, CoolFarm uses machine learning to monitor sensors and a unique camera system to sense plant growth, quality and vitality all while providing the grower with an improved user interface and information dashboard. The CoolFarm system can be used in traditional greenhouses, vertical farms, and container grow
The UTEN team discussed goals and objectives with CoolFarm for the coming months, the major ones being:

1. Identify potential growers willing to participate in trials to obtain key performance data.
2. Review the go-to-market strategy, value proposition, and US market opportunity.
3. Identify key channel distributors for the US market.

The UTEN team identified a local green produce grower that was willing to consider undertaking a trial within a currently operating greenhouse and a proposal was made to the manager. After review with the owner, it was decided to postpone the trial until it starts building two new greenhouses in late fall 2016 and would be open to installing a CoolFarm system at that time.

The UTEN team helped CoolFarm collect USDA statistical data for 2014 that led CoolFarm to rework its US market assumptions. After a UTEN team member traveled to the Indoor Ag conference held in Las Vegas, a key learning was that growers did not consider CoolFarm equivalent to traditional greenhouse control systems but to a software system and were balking at CoolFarm’s proposed price point. The team also learned that large market leaders in control systems were behind in the area of new machine-learning software systems, which was identified as an opportunity. As a result of the above and discussions with UTEN, CoolFarm decided to change its pricing model and to approach the market leaders about potential license deals. CoolFarm is currently in licensing discussions with the two market leaders.

The doDOC company was founded in May 2013 as an outgrowth of a PhD research program in scientific document search and publishing. In February 2014, the company won a Portuguese national competition for the management of scientific documents that provided external validation of the company’s innovations. During the Lisbon Challenge in summer 2014, doDOC began the process of contacting research groups in large enterprises and landed a pilot
with a leading international pharmaceutical company. This pilot would prove to be pivotal as the founders came to realize that opportunities existed in the area of regulated documents - documents which are part of a collaborative record of research needed for drug certification. During this period doDOC’s participation in the Techstars program and feedback from the initial pilot led the company to fully develop a document and content management platform for regulated and audited documents.

By mid-2015 the company felt it was ready for a serious push into the market. While Techstars and the pilot helped the company refine product fit and initial messaging for investors, the founders understood the journey from product definition to market engagement was at the time a leap of faith.

As the founders contemplated the path to sales, they attended a presentation in Portugal about the UTEN Global Startup Program and came away impressed by its advice regarding the challenges and approaches to building global sales and marketing. They decided that participation in the program would be a way to fill gaps in their commercial sales and marketing experience, particularly in global markets. They applied to the program and were selected as part of the 2015-2016 cohort.

During the UTEN orientation and onboarding process, doDOC rapidly refined the company’s value proposition and developed a market-ready presentation focused on customer pain and need. Company executives proved to be very quick studies and won the pitch competition at a UTEN-sponsored event at Austin’s Capital Factory. What was unexpected to the founders was the depth of time UTEN spent developing go-to-market strategies, including target segmentation, market communications, enterprise sales planning, and connections with individuals that provided a wealth of knowledge regarding US markets. Direct mentor involvement throughout the program prepared the company for the rigors of prospecting and sales, and provided a roadmap for commercial activities.

Proof of the company’s tenacity and the value of UTEN’s participation can be seen in the results from 2016. The company has landed a significant number of new pilots and built a commercial pipeline in excess of $2M. Further, based on the successes of 2016, the company is now poised to rapidly expand sales and marketing in the first half 2017 and potentially branch out into new markets via a contact facilitated by the UTEN program. The value of UTEN, according to the founders, has been a definite acceleration of their sales progress. UTEN continues to provide mentoring and assistance as doDOC expands operations.

Without the depth of sales and marketing expertise, given unselfishly, and key contacts arranged by UTEN, we would have not been able to achieve the results we have in 2016.

Frederico Cismondi, CEO doDoc

Dognaedis

https://www.dognaedis.com/

Dognaedis was accepted into the program as part of the 2015-2016 cohort and shortly thereafter found itself involved in significant investment discussions with Prosegur, a multinational security company headquartered in Madrid, Spain. Prosegur eventually invested in Dognaedis and its CodeV service.

This event created a shift in priorities away from Dognaedis’ short-term plans to sell its cyber-security solutions in the
US with the help of UTEN. In spite of this decision the UTEN business development team had significant impact on helping Dognaedis create a stronger value proposition and express its novel and unique cyber-security capabilities to close the strategic investment by Prosegur in 2016. By working with the UTEN program and team, Dognaedis made important adjustments to its overall go-to-market strategy and successfully refined its entrepreneurial storyboard for its Portolan/CodeV solutions, which helped it refine the multiple product categories in its offering. According to the founders, the simple fact that Dognaedis had developed a North American selling plan in partnership with UTEN enhanced Dognaedis’s value in the eyes of the Prosegur investment team.

In the UTEN program, we saw with our own eyes what it means to be focused 100% on the market. Compared to other similar programs that we were involved in in the past, the UTEN program is more real. You gave us a lot of knowledge that came both from the theoretical side and from real experience.

Francisco Rente, CEO Dognaedis

Feedzai
https://feedzai.com/

In 2011, Feedzai entered the UTEN Global Startup Program (then known as US Connect) with the goal to bring its big data analytics platform into the US energy sector. While working with UTEN in 2011 and 2012, the company applied its real-time high-volume data analytics to market applications including monitoring bank transactions, ETL of call-detail-records for telecommunication operators, smart grid energy monitoring, and wind farm performance verification. However, market analysis conducted during the program revealed that the most lucrative and proximate market for Feedzai’s technology was credit fraud prevention.

The UTEN team helped Feedzai secure high-profile meetings in the United States. In 2012, CEO Nuno Sebastião said, “The UTEN team has devoted time and diligence to accompany us to a number of meetings arranged with companies such as Dell, IBM, and Adobe. For this we are very grateful.”

While working with UTEN, Feedzai obtained its first US client in credit fraud prevention, Cardinal Commerce. This deal validated the new market opportunity and led to private venture funding of $24 million since 2013.

The pivot to fraud prevention proved extremely fruitful. In 2016 Feedzai caught the world’s attention with its year-on-year growth rate of over 300% for providing anti-fraud protection online. In February 2016, Forbes contributor Tom Groenfeldt noted, “Fraud has proven to be good for Feedzai... and it says it now handles $1 billion a day in total payments volume.” Tech Tour, which publishes an annual list of the fastest-growing European tech companies (known as “baby EUnicorns”), awarded Feedzai with its Special Jury Prize, placing it in the top three on the Tech Tour list.

Feedzai’s growth has paid off in job creation. Feedzai currently employs more than 100 and lists 24 open positions on its website. In addition to three locations in Portugal, Feedzai has offices in London, New York City, and Silicon Valley.

EyeSee
http://www.eyeseesolutions.com/

EyeSee Solutions offers a novel digital advertising platform that allows digital publishers to insert dynamic ads into optimum, non-intrusive locations in image or video content. EyeSee joined the UTEN program as part of the 2015-2016 cohort.

In March 2016, EyeSee was selected to compete in the
SXAméricas international pitch competition at South By Southwest Interactive. With significant pitch deck coaching and mentoring from UTEN, the EyeSee team won first place in the competition.

EyeSee’s understanding of the complex technical and business ecosystem around online advertising was enhanced through an introduction made by the UTEN team to a business strategist with over a decade of experience at major online ad industry leaders. EyeSee formally engaged him as a business advisor in early 2016. He helped the EyeSee team refine its strategy and made key introductions to prospective corporate clients and partners.

The UTEN team coached EyeSee through negotiations with a potential seed stage investor, helping the company review term sheets prior to an agreement. Although the deal was not completed, the experience will better prepare EyeSee for future funding negotiations.

Findster
https://getfindster.com/

Findster has developed a state-of-the-art innovative GPS tracking system for pets and small children. The Findster system uses a proprietary radio frequency (RF) technology to extend communications range 10-20 times further than typical Bluetooth-enabled tracking systems, reaching a range of up to 1 km versus the 50-100 meter range of a Bluetooth tracker. The Findster GPS tracker does not use cellular technology and thus does not require a cellular fee as do other cellular GPS-based tracking systems. Findster is a business-to-consumer product company and is not typical of the companies chosen by UTEN for business development. However, Findster asked for help in assessing the US market for Findster Pets in retail stores and opportunities to market the Findster Kids model to US business entities such as nurseries, day care facilities, or amusement parks.

Consumer interest in the Findster GPS system for both pets and kids was demonstrated by a very successful crowdfunding campaign in 2015. The UTEN team explored and provided Findster with points of contact for major pet and consumer retail stores. Market research indicated that brick and mortar retailers would require a long lead time to accept the product and order inventory, and that the margin required was unattractive to Findster at this phase in product launch. Findster decided instead to launch its trackers from its website and through Amazon Launchpad. Findster successfully fulfilled product shipments to its campaign backers and learned from its customers’ comments and reviews to improve and build upon its initial efforts. In late 2016 the Findster team launched a new crowdfunding campaign to develop and deliver a new Findster Pet with an increased tracking range of up to 3 km and improved battery life, among other new features. The new crowdfunding campaign was oversubscribed in less than two weeks. Findster anticipates delivering the new version of Findster by end of year 2016. Findster is also initiating an affiliate marketing program targeting pet shelters and rescue operations.

The UTEN program is a great opportunity for Portuguese companies with a B2B product that are wanting to go to the US market.

André Carvalheira, CEO Findster

Line Health
http://www.linehealth.com/

Line Health was initially accepted into the UTEN program in the 2014-2015 cohort under the name PharmAssistant, when it was developing a “smart” pillbox and mobile app for
increase in conducted by UTEN in 2014 the company rebranded itself as Line Health and made the decision to focus on engagement and alignment among healthcare providers, payers, and patients. The company engaged St. David’s Hospital in Austin to conduct a clinical trial for stroke patients to determine whether the smart pillbox and app would lead to greater patient adherence to taking medication. UTEN helped identify potential funding agencies and collaborated on grant applications to the National Institutes of Health and the American Heart Association. Funding for the study was not obtained and the planned trial did not take place. Subsequent to the proposed trial, Line Health participated in a technology pitch competition that led to discussions with a healthcare provider (Baptist Hospitals of Arkansas) and a payer (Arkansas Blue Cross and Blue Shield). These ongoing discussions led to another pivot by the company to move away from a smart pillbox and app and to develop a more sophisticated smart pill device to meet the needs of persons with four or more co-morbidities under medication. Line Health worked with its product design firm to prototype a device that can store and dispense as many as 10 different medications. As a result of the engagement with both a healthcare provider and a payer, Line Health was able to raise additional funds, with both of those organizations taking an equity position in the company. Line Health also partnered with a pharmacy to provide and service the medical device.

Line Health is currently recruiting patients to conduct a small trial for patient self-reported medical adherence. This will lead to a larger trial of 150-200 patients in 2017 with the goal of demonstrating that improved medication adherence leads to fewer hospitalizations and thus less payout by the insurer.

PeekMed
http://www.peekmed.com/

PeekMed was accepted in the UTEN 2015-2016 cohort for business development activity. PeekMed has developed a powerful 3D pre-operative planning suite of software for orthopedic surgery. The PeekMed 2D/3D hybrid tool suite is a cloud-based solution that can be used to plan a number of procedures such as osteotomy, templating of materials or implants to be used in surgery, and trauma cases that
involve fractures. PeekMed states that its software can reduce surgery time by 20% and reduce sterilization costs 50% per surgery. During the review process it was determined the PeekMed software will require FDA 510(k) registration prior to being sold in the US. Due to the regulatory requirement the company was accepted for the acceleration portion of the UTEN program.

Discussions with the UTEN team focused on two goals:

1. Recruit orthopedic surgeons to conduct trials with the PeekMed system and provide feedback on its utility in planning surgeries and impact on surgical practice.

2. Contact medical device manufacturers who make digital imaging X-ray equipment about potential licensing of the software as part of a total solution offering.

The UTEN team introduced PeekMed to medical device manufacturer Zimmer, four orthopedic surgeons, and St. David’s Hospital. Out of these conversations two physicians agreed to conduct trials using the software.

During the year PeekMed attended a congress on orthopedic surgery in Geneva where it met a product manager from GE Healthcare who expressed interest in the software as an adjunct to GE’s X-ray machines. Discussing this with PeekMed, the UTEN team coached it on working up the chain of contacts within GE Healthcare to find the right group responsible for innovation research and planning. PeekMed successfully arranged for meetings with GE to discuss a potential licensing deal, and talks are ongoing at this time.

Petable

http://petable.care/

Petable is a mobile app that was developed with both pet owners and veterinary clinics in mind. For pet owners the Petable app includes a pet’s complete health and life records, along with meaningful information from Petable’s team of veterinarians relevant to a pet and its owner. For veterinary clinics Petable provides a back office with integration to its practice management software, giving access to a client’s remote behavior and a platform for guided pet care. In addition, Petable provides clinics with a marketing platform to promote more client engagement, which results in increased revenue for the clinic through more client and pet visits for products and services. Petable’s business model is a
Petable was accepted for acceleration coaching and mentoring in the UTEN program, and to perform market product fit validation for the US market. The goals were:

1. Determine whether the Petable app meets US veterinarian expectations with respect to features and integration into practice management software.
2. Validate the pricing model in the US market.
3. Develop the go-to-market strategy for the US.

The UTEN team arranged for meetings with local veterinary practices and a veterinary clinic holding company that owns numerous clinics in several states. From the interviews it was decided that Petable needed to incorporate more features into the product to meet US veterinarian expectations for such a product, specifically for back office integration and marketing for client engagement. Petable obtained feedback on what price range for the app would fit the market. Petable developed a new strategy to market the app directly to consumers through social media, and then use those clients’ desire to connect with their vets as a tool to market Petable to clinics.

As a result of these learnings, Petable returned to product development, hired additional programmers, and was able to raise a new round of funding from investors to execute its plan. Petable is now customizing the app to meet the criteria set by the veterinary clinic holding company and will be conducting trials in late 2016 and early 2017.

SWORD Health
http://www.swordhealth.com/

SWORD Health applied to the UTEN program for the 2015-2016 cohort. SWORD Health has developed the SWORD Phoenix rehabilitation system, a combination of novel neuroscience-driven therapeutic methods, wearable sensors, and software to deliver more efficient motor rehabilitation to stroke patients. The Phoenix system can be deployed in a one-on-one setting with a patient in a rehabilitation clinic, in a group setting with a single rehab nurse overseeing several patients using the system at one time, or by patients at home. Data are submitted to the cloud and can be viewed by the patient’s healthcare provider to see that the prescribed exercises are being performed as intended, and the prescription can be updated as the patient progresses in his or her rehabilitation.

SWORD Health was selected as one of the most innovative companies in Europe and won a €1.3M Horizon 2020 grant. SWORD Health’s Phoenix system will require FDA 510(k) Class I registration prior to marketing and selling in the US, so SWORD Health was accepted by UTEN for acceleration, coaching and mentoring until this FDA requirement is met. In discussion with the UTEN team a set of objectives was outlined with SWORD Health, including:

1. Seek paid clinical trial opportunities in the US.
2. Visit skilled nursing and rehabilitation facilities to learn more about their daily challenges and how they provide services and payments under the Affordable Care Act (ACA).
3. Identify FDA consultants who can guide SWORD Health in submission to the FDA 510(k) process.

The UTEN team introduced SWORD Health to the St. David’s Hospital NeuroTexas Institute Research Foundation to discuss the potential to conduct a paid clinical study for stroke patients at St. David’s. The hospital was positive on the idea and an NDA was signed and a trial protocol and contract were jointly developed. However, prior to initiating the trial the research program decided to go in another direction and the trial did not proceed as planned.

The team made several visits to local skilled nursing homes and rehabilitation facilities. SWORD Health learned that payments under the ACA would be bundled, meaning that Medicare and Medicaid would set a specific reimbursement amount for stroke treatment and physical rehabilitation, whether in-hospital, outpatient, or in-home.

As a result of regulatory requirements and a need to begin generating revenue, SWORD Health made the decision to focus on generating initial sales of the SWORD Phoenix system in Portugal, and continued development of the software. In addition to the focus on sales, SWORD Health also changed the pricing model from licensing per patient to licensing per clinic at €150/mo per system. It now has a 60-clinic partner considering a multi-clinic trial.

UTEN provided SWORD Health with contacts at two FDA consultancy firms. SWORD Health has continued planning for entry into the US market as it addresses FDA requirements, and has created a partnership with Genesis Rehab Services, a provider with over 1,700 clinics in the US, and with a medical equipment distributor.

UTEN has proven to be invaluable because it helped us refine a message, a product, and a go-to-market approach to the biggest pet market in the world. UTEN basically meant that the timeframe for our entry into the US market was shortened by months if not years.

Bruno Farinha, CEO Petable

Veniam
https://veniam.com/

Veniam offers a platform as a service for managing what it calls “the Internet of Moving Things,” leveraging 802.11P and DSRC technical standards for metropolitan class wireless vehicle-to-vehicle (V2V) and vehicle-to-everything (V2X) communications protocols.

Early in its engagement with the UTEN program, Veniam
closed a successful $25M series B funding round.

UTEN assisted Veniam with the identification of a number of prospective customer or partner relationships. At Veniam’s request, UTEN arranged initial customer engagement with officials from the City of Austin and the Austin regional transit authority. With the encouragement of the UTEN team, Veniam participated in the Smart Cities Innovation Summit in Austin, where it identified over ten US prospects. UTEN also introduced Veniam to a large systems integration company with several major nationwide US fleets in its customer base, opening the possibility of referrals or a distribution deal.

3.1.4. 2016 Application Call

3.1.4.1. Call and results
From May 23 through July 17, 2016, UTEN accepted applications to the 2016-2017 Global Startup Program from Portuguese companies in all technology verticals. In May and June, UTEN publicized the call and recruited applicants through in-person appearances at partner organizations in Portugal as well as the websites, mailing lists, and social media of UTEN and its partner organizations.

The application form included quantitative and qualitative questions intended to gauge market readiness, the executive team’s ability to communicate its value proposition and go-to-market strategy, and access to the financial resources necessary to internationalize.

In the end, 36 companies made complete applications to the program, representing eight industry sectors and seven regions of Portugal.

3.1.4.2 Pre-selection process
As the UTEN team prepared for the 2016-2017 cohort selection, a number of learnings from previous years shaped enhancements to the process. Most notably the 2015-2016 cohort revealed that a significant number of companies were simply not prepared to enter a global market and were not in a position to fully leverage UTEN’s business development activities.

The primary hurdles encountered by past cohort companies were:
- Lack of product readiness for a global market, including necessary regulatory compliance.
- Unrealistic expectations of how quickly products could be made market-ready.
- Lack of committed resources to launch and sustain a US presence.
- Financial resources not sufficient for adequate investment in demand generation and sales.
- Cultural differences between Portugal and other markets in the approach to selling.

To increase the efficiency of Portuguese investments in technology commercialization, and to minimize the impact

Session of the global workshops in Portugal
of ineffectual false starts or underperforming tactics, the UTEN Team modified its company selection phase to emphasize more in-depth training and preparation as part of the selection process. By more fully engaging prospective cohort companies and imparting greater understanding of the requirements for globalization in advance of the final selection, UTEN sought to ensure companies selected would have a much better chance of gaining and sustaining success.

Specifically, the selection process was expanded to include three pre-selection sessions designed to deepen the cohort executive management teams’ appreciation of the significant commitment and investment required to break into a new market. By expanding the executives’ understanding of the risks and hurdles of going global, UTEN believed that a more objective assessment by both evaluators and applicants could guide selection and prepare the companies chosen for a well-informed launch into global markets. In addition, UTEN would be able to supply, for companies not chosen, an objective roadmap of actions needed to prepare for global commercialization.

The three sessions added to the selection process were a mandatory webinar focused on the key pillars of a globalization strategy; in-country workshops in Portugal focused on sales, marketing and corporate structures; and a one-week immersion in the US focused on refining strategies, costs of doing business, and first-hand market validation. The following paragraphs provide an overview of each session.

Mandatory webinar on globalization
Two identical webinars were held on September 7 and 8 for all of the companies that applied for the 2016-2017 cohort. The webinar content focused on three primary areas: learnings from prior cohorts, identifying the most critical obstacles to success, and a first glance at what selling globally entails. Emphasis was placed on executive commitment, financial requirements, and the effort required to build a global sales and marketing capability. Each company was asked to consider each of these points and be prepared to discuss specific plans and objectives during the in-country workshops to follow. The sessions also described the selection process and set expectations for selected companies.

Global readiness workshops in Portugal
In-country workshops were held during the week of September 15-22 in three locations in Portugal (Lisbon, Coimbra, and Braga). The workshops focused on distillation of the companies’ value propositions into customer-centric terms; developing objectives and budgets for sales; and roadmap strategies for establishing a global presence, including incorporation and facilities planning.

All but two of the 36 companies that applied attended one of the workshop sessions in Portugal. Evaluation of each company during the workshop helped the UTEN team determine which companies would be invited to the US to participate in the final stage of selection. This determination was very important given the expense each company was
expected to incur in traveling to the US. The UTEN team’s goal was to ensure that those willing to make the investment were positioned to fully benefit from the experience. At this juncture a number of the companies, upon learning more about the costs of globalization, opted out of the program until they were more prepared. For these companies, the UTEN team provided a number of recommendations for milestones that would prepare the applicants for future global entry.

UTEN staff conducted a survey of participants in the three workshops; 32 companies responded, and 98% of respondents said that the workshops “met expectations” or better, and 67% said they “exceeded” or “far exceeded” expectations. All of respondents said they would recommend the workshops to other entrepreneurs.

Respondents gave particularly high scores to the workshop segments on “Selling your product/service” and “Storyboard (telling your story).” When asked to make suggestions for future UTEN workshops, a number of respondents suggested that the workshop be lengthened from one day to two for more in-depth personal consultation by the UTEN team.

The value of the in-country workshops to participants was evident from this positive feedback, and the workshops provided the UTEN team with very specific measurements of applicant readiness to guide the selection of companies for further participation (see Appendix).

Global market immersion in Austin: orientation week

The final step in the selection process required candidate companies to participate in a week-long orientation session held November 14-18 in Austin. After meeting with all 36 applicant companies in September, UTEN invited 13 of them to proceed to the Austin orientation.

On the first day of the week-long program, each candidate company delivered a 10-minute pitch that it had prepared in advance, followed by extensive discussion and feedback from the UTEN business development team and other applicant companies. The pitches were not targeted at customers or investors, but rather to communicate the companies’ international sales and business development strategies.

On the second day, candidates delivered their improved pitches to a Mastermind/Success Committee of over 20 senior executives from the Austin technology and business community. Success Committee members provided their feedback and strategic insight, as well as sharing connections to potential partners, distributors, and customers. The all-day event included lunch and an evening networking mixer to give local and visiting executives ample time to interact.

The remainder of the week was spent on individualized coaching and mentoring by the UTEN team and outside business executive meetings focused on customer discovery and market validation. The UTEN team made significant efforts to pre-arrange three or more direct one-to-one business
meetings for each candidate company. One purpose of the meetings was to assess each venture’s product readiness, market appeal, and ability to pitch and promote its product or service in the US at this stage of its business maturity, particularly for candidates with limited customer or revenue traction to date in Portugal or the EU. UTEN has found that face-to-face prospect engagements early in the process provide valuable insights from the “voice of the customer” and highlight hurdles that companies are likely to encounter in the sales process.

Additional activities during the week included a group tour of the Capital Factory accelerator and co-working space; a talk by guest speakers Paul O’Brien and Rob Smithson on the nuances of raising angel capital in the US, with particular attention to Austin; and a talk by Charlie Jackson, Chief Happiness Officer of the Diversity Fund, an equity crowdfunding platform.

Final selection
At the conclusion of the selection process, the UTEN team chose six companies to be part of the 2016-2017 cohort. A significant byproduct of this process has been the preparation of specific strategies and tactics for 2017 tailored to each of the six companies. The UTEN team is confident that participants will realize rapid progress towards their respective goals.

Taking a longer-term perspective, UTEN is drafting a learning agenda for consideration that the team believes will offer innovators and entrepreneurs exposure to the key hurdles to globalization earlier in the ideation and innovation process.

Earlier consideration of go-to-market options is important for evaluating trade-offs of licensing versus commercial sales, and for factoring in customer pains and motivations that will accelerate progress towards a highly marketable solution.

3.1.4.3 Companies selected for 2016-2017 cohort
CrowdProcess (James)
https://james.finance
CrowdProcess is the data science company behind James, a software tool for credit risk modeling based on state-of-the-art machine learning algorithms and techniques. James was created to enable risk officers to easily emulate the best modeling practices without investing strongly in R&D and training.

For institutions that do not possess their own risk team or statisticians, CrowdProcess can use James to create risk models based on their historical data (e.g., past loan performance) and feed their decision engines with a probability of default, similar to what one could get with FICO but tailored to the bank and with higher accuracy.

As part of James’s sales cycle, CrowdProcess has been showcasing it at different financial institutions and pitting it against incumbent models. The results have been overall very positive and James has produced models that reduce losses by 12% and add an extra lending potential of 4% on...
average. This has led to its deployment in two clients: Cofidis (part of Crédit Mutuel) and EVO Banco (owned by Apollo Global Management).

**LaserLeap Technologies**


LaserLeap Technologies is a cutting-edge non-drug and drug transdermal delivery company founded to address the need for a painless method of delivering formulations and drugs through the skin to promote faster, more effective treatments.

LaserLeap has developed the LL Dermal system which is based on the generation of high-frequency ultrasounds using a portable laser and piezophotonic materials that efficiently convert light pulses into pressure waves capable of temporarily changing the skin structure to facilitate the delivery of formulations and drugs through the skin. It is in the early stages of commercialization of its proprietary hyaluronic acid and whitening agent solution for the aesthetic market classified under the category of safe, non-invasive and effective treatments.

**Loqr**

https://loqr.io

The Loqr authentication-as-a-service platform preemptively avoids fraud in financial transactions by continuously accessing risk based on reliable client authentication, behavior and context, using clients’ smartphones.

**Perceive3D**

https://www.perceive3d.com

Perceive3D (P3D) is a Portuguese start-up company founded in 2013. P3D builds on advanced knowledge in computer vision to offer innovative embedded image-software features for improving visualization and assisting surgeons during minimally invasive surgery (MIS). From 2013 to 2015, P3D has been focused on developing its first product, in.sight, a software application that processes endoscopic video in real-time to provide unique image enhancement features with applications in arthroscopy, laparoscopy and gastroenterology. The enhancement features include: radial distortion removal, dark region brightener, contour enhancer and anatomical part highlighter. The in.sight is just the first step of P3D’s much broader vision for the future of CAOS (Computer Assisted Orthopedic Surgery), which consists of a complete family of image-software applications for guiding the surgeon throughout arthroscopic procedures. P3D has recently developed a unique CAOS software solution: in.nav, the first real-time surgical navigation system that can be effectively used during arthroscopic surgery.

**Shelf.ai (Xarevision)**

http://shelf.ai and http://www.xarevision.pt

Shelf.ai brings the power of artificial intelligence to
e-commerce. With Shelf.ai, customers of grocery shoppers engage in a conversation and manage their supermarket shopping lists and other retail-related activities simply by saying the products they want to their smartphones.

Voice recognition, machine learning and AI-powered deep knowledge of a retailer’s product range and customers’ past behavior ultimately improve the usability of smartphones and customer satisfaction for online shopping, resulting in lower rates of shopping cart abandonment and higher sales for retailers.

Shelf.ai is a spin-off of Xarevision, a company with over ten years’ experience working on retail-oriented solutions, artificial intelligence, wearables, mobile, business intelligence, analytics and big data, among other software solutions, mostly for brick-and-mortar retailers. Shelf.ai draws on the founders’ 30-plus years of joint experience in retail and artificial intelligence, and Xarevision’s pool of knowledge and enterprise software experience.

Sphere Ultrafast Photonics

http://www.sphere-photonics.com

Sphere Ultrafast Photonics offers a new generation of products and services in the ultrafast pulsed laser regime: completely new devices based on patent-pending technologies enabling high performance measurement and control of ultrafast laser systems.

Ultrafast lasers emit the fastest and brightest flashes (or pulses) of light ever produced, with durations in the femtosecond (fs) range (1 fs = 0.000 000 000 000 001 seconds). This unique characteristic makes these lasers very important for applications in medicine and industry. In ophthalmology, they are used in the diagnosis and treatment of retinal and corneal pathologies. They are also valuable for high quality and precision micromachining of materials, such as drilling tiny holes for speakers in modern laptops.

A barrier to using ultrafast lasers with high quality and precision has been the lack of a laser pulse measurement and control system for measuring the temporal profile duration and compressing the pulse if necessary. Sphere Ultrafast Photonics fills that gap, enabling reliable and cost-effective use of ultrafast lasers in new medical and industrial applications.

3.2. UT Austin|Portugal Annual Conference 2016

The UT Austin|Portugal Program held its Annual Conference and Exhibition on “Program Achievements and Future
Opportunities” on May 23rd and 24th, 2016, at the Rectorate Building of the Universidade Nova de Lisboa (Campolide Campus) in Lisbon.

With nearly 200 participants, this two-day event brought together students, professors, investigators and leaders from Portuguese and US institutions, covering all areas of the program - Advanced Computing, Applied Mathematics, Digital Media and Emerging Technologies - to present the program’s achievements and discuss future developments. The event opened with welcome remarks by António Rendas (NOVA rector), Fernando Santana (UT Austin|Portugal National Director), Marco Bravo (UT Austin International Director), Robert A. Peterson (UT Austin PI), Robert A. Sherman (US Ambassador), António Cunha (CRUP President), Paulo Ferrão (FCT President) and Manuel Heitor (Minister of Science, Technology and Higher Education).

The four research areas of the program presented their achievements concerning courses, events, projects, students, startups, etc. Moderated by João Sentieiro, these panels, which had more than 20 speakers, were an exciting opportunity for the audience to know all the work that has been carried out in all areas of the program, namely concerning courses, workshops, student work, and research activities.

The second day started with a roundtable of entrepreneurs associated with the UTEN Global Startup Program. With moderation by Greg Pogue, company representatives presented their statements about the challenges of going global and debated the topic with other invited discussants.

Following was a roundtable discussion about future program developments, moderated by Miguel Castanho (Vice-President FCT), with statements from Nicholas Peppas (UT Austin), Thomas J. R. Hughes (UT Austin), Amílcar Soares (IST), Fernando Lau (IST), and also discussants Lars Montelius (INL), José Manuel Mendonça (FEUP/INESC TEC), and Heitor Alvelos (FBAUP).

Robert A. Peterson summed up the achievements and future of the program, and Fernando Santana, Marco Bravo, Miguel Castanho, and Maria Fernanda Rollo (Secretary of State for Science, Technology and Higher Education) offered closing remarks.

A total of 45 posters and eight demos were presented at the UT Austin|Portugal Annual Conference as a result of the call for posters and demos published for this purpose. These reflected students’ and investigators’ work from all academic areas of the program, both from Portugal universities and research centers and UT Austin.

A ceremony to launch the renewed UT Austin|Portugal Program was conducted to recognize the official start of the

Ambassador Sherman (center) is pictured with Alexandre Silva of Bliss Applications and UTEN team members Marco Bravo, Bruce Flory, Donovan Miller and Postdoctoral Fellow Francisca Aroso
CoLab and UTEN programs. The ceremony took place at the Rectorate of the University of Porto and was attended by its Rector and the Vice President of the Foundation for Science and Technology (FCT), the program’s sponsor. The ceremony closed with a feedback session that provided excellent comments that were full of enthusiasm for the future.

3.3. Distinguished visitors

3.3.1. Ambassador of Portugal to the United States

On April 26-27, 2016, Domingos Fezas Vital, the Portuguese Ambassador to the United States, visited Austin and The University of Texas. The Ambassador was accompanied by Rui Boavista Marques, Trade and Investment Commissioner of AICEP Portugal Global. While at the university, the Ambassador met with UT Austin|Portugal Principal Investigator Robert Peterson, Executive Director Marco Bravo, and members of the UTEN team to learn about their work supporting business development by Portuguese companies through the UTEN Global Startup Program.

The conversation touched on recent growth in Portuguese exports to the US, international successes by Portuguese companies in the financial security and cleantech sectors, the upcoming Web Summit in Lisbon, and potential city-to-city relationships between Austin and cities in Portugal. The Ambassador also met with CoLab academic directors Sharon Strover, Keshav Pingali, and Brian Korgel and a number of Portuguese graduate students to learn about CoLab’s ongoing research and education activities.

Other stops during the Ambassador’s visit included a session with local companies organized by the Chamber of Commerce, meeting at Austin City Hall with Mayor Steve Adler and Economic Development Director Kevin Johns, and a meeting with Texas Governor Greg Abbott.

3.3.2. Ambassador of the United States to Portugal

On May 30, 2016, Robert A. Sherman, the United States Ambassador to the Republic of Portugal, visited The University of Texas at Austin to learn more about the UT Austin|Portugal Program and the UTEN Global Startup Program. GSP focuses on expanding global market opportunities for Portuguese technology-based startups.

Earlier in 2015, Marco Bravo and Dr. Robert A. Peterson met with Ambassador Sherman at the United States Embassy in Lisbon to introduce him to the technology startup program between Portugal and the US. The ambassador indicated his firm support of Portuguese startups and promised to visit the IC² Institute and The University of Texas at Austin to learn more about the related programs and activities.
The Ambassador met with the UTEN team and got acquainted with the activities of many Portuguese startup companies that participate in the Global Startup Program and provided suggestions for the operationalization of the program.

During the recent meeting, Ambassador Sherman was briefed on GSP’s successes and challenges. Ambassador Sherman also talked with Alexandre Silva, who heads the operation of Bliss Applications in Austin. Issues around immigration to the United States were discussed at length, as well as challenges these companies are currently facing, such as the ability to market their innovations in the highly competitive environment of the United States. Simply put, the way a company structures its business plan for a potential customer is completely different from the strategy it normally uses to pitch to an investor.

During the meeting Ambassador Sherman made two offers that demonstrate his support for the GSP program. The first offer was to have his Consul go on the road in Portugal to help promote awareness of the program, and the opportunity it offers, and to provide advice relating to the process of immigration. The second offer was to use his diplomatic relations with the new Portuguese President, Dr. Marcelo Rebelo de Sousa, and his advisers to discuss the program and its unique opportunities for the technology sector in Portugal. The Ambassador declared himself quite happy to use the network of the United States Embassy in Portugal to serve as a broker and spread the word. He further committed to hosting an event at the Embassy to specifically promote the program. The strength of his dedication was underscored when he suggested that Marco Bravo begin monthly meetings with his team at the embassy to work out additional methods to support the program.

My job is promoting US interests, and this program provides benefits that you see both in the United States and in Portugal.

Ambassador Robert A. Sherman

3.3.3. MBA students from Porto Business School

On June 20, 2016, Marco Bravo hosted a visit of 25 MBA graduates from the Porto Business School. Chris Meyers of the UTEN team and Greg Pogue of the IC² Institute also participated in the visit.

After a quick presentation about the technology commercialization efforts and achievements of The University of Texas at Austin, the discussion was centered on the challenges and opportunities for the internationalization of Portuguese businesses to the United States, followed by an animated Q&A session.
Without the depth of sales and marketing expertise, given unselfishly, and key contacts arranged by UTEN, we would have not been able to achieve the results we have in 2016.

Frederico Cismondi, CEO doDoc
As a stamp of approval, it’s really important. When we say we are in a program with the University of Texas, immediately everybody says, oh, that’s really interesting. It says to everybody who’s listening, okay, these guys have a plan.

Bruno Farinha, CEO Petable

1.1. Findings from the Surveys of Portuguese TTOs, 2007-2014

Research from universities has long been acknowledged as a major source of potentially valuable knowledge (Hall et al., 2014). Much of that knowledge has made its way into the commercial market, mostly through technology transfer offices (TTOs). These are often regarded as “boundary spanners” or “brokers” between academia and industry (Rothaermel et al., 2007; Gubitta et al., 2015) and considered of strategic importance to universities devoted to the commercialization of academic knowledge (O’Kane et al., 2015).

A recent study by Lee and Stuen (2015:1) suggests that “universities that streamline their technology transfer efforts and improve their research reputation through support for basic research will see long-term success in technology commercialization.” TTOs are a pillar for that basic research support constituting the “organizations responsible for recognizing the inventions with the greatest potential for making a significant positive impact and choosing the best course of action to support their development” (Gubitta et al., 2015: 2).

The analysis of TTO activities and performance dynamics is thus of paramount importance. In the present report we present the evolution of the activities of Portuguese TTOs, from 2007 until 2014, based on past and present direct surveys of TTO coordinators. The first annual UTEN network survey of TTOs was undertaken in 2010. The updated view of technology transfer activities in Portugal is grounded on the 5th wave of the UTEN Survey, launched in May 2015 and finalized in June 2015.

![Figure 1: Number of employees (in full-time equivalents) in Portuguese TTOs](image)

Note: In 2012 (2013-2014) survey 18 (13) TTOs responded.

Source: UTEN Surveys, 2010-2015

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1 As a result of the merger between the Technical University of Lisbon and the University of Lisbon, the Universidade de Lisboa (ULisboa) was born. In this new University, the Project, Entrepreneurship and Knowledge Transfer Office was established encompassing two former TTOs: UL Inovar and UTL rectory’s office. Thus, instead 18 TTOs we have now 17 TTOs. Responses were received from: Instituto Pedro Nunes (VIC IPN); Instituto Politécnico do Porto; Universidade Católica Portuguesa; Universidade da Beira Interior (UBI); Universidade da Madeira (TecMU); Universidade de Aveiro (UATEC); Universidade de Évora; Universidade de Lisboa – GPTEC and TT@IST; Universidade do Algarve (CRIA); Universidade do Minho (TECMinho); Universidade do Porto (UPIN); Universidade Nova de Lisboa (FCT UNL). Aurora Teixeira (Faculdade de Economia, Universidade do Porto; INESC TEC) was the researcher responsible for the survey.
We contacted the 17 Portuguese TTOs that belong to the UTEN network and obtained responses from 13. Responses referred to the years of 2013 and 2014. By 2012, the 13 respondent TTOs were responsible for the employment of 72 full time equivalent (FTE) employees, having an average size of 5.1 FTE employees, and a total budget of 3.352 million euros, representing an average budget of about 240,000 euros per TTO. The 4 non-respondent TTOs were, by 2012, larger (an average of 7.1 FTE collaborators per office) but with slightly smaller budgets (on average, 231,000 euros).

1.1.1. Characteristics and organisation of the TTOs

The respondent TTOs are, in general, young (with an average age of 10 years old by 2014) and small, with an average number of collaborators, in full time equivalents, of 4.5. The smallness of the Portuguese TTOs was further exacerbated in the last two years with the average size declining sharply (cf. Figure 1).

As one may observe in Figure 2, most respondent TTOs have at least one of its staff members with university qualifications in “engineering or natural sciences” (16 out of 18 in 2012, and 11 out of 13 in 2013-2014) or “management or business administration” (14 out of 18 in 2012 and 8 out of 13 in 2013-2014). In contrast, only 6 (out of 18) TTOs in 2012 and 4 (out of 13) TTOs in 2013-2014 have staff members with “law” qualifications.

In 2014, only 6 (out of 13) TTOs had multidisciplinary teams (with 3 or more distinct qualifications). This is strongly related with the size of the TTOs but not so much with the number of distinct activities that TTOs claim to perform.

All of the responding TTOs indicated that they perform activities such as raise awareness/disseminate information on intellectual property rights and entrepreneurship, provide services regarding the creation or support of start-up companies based on their institution’s inventions, and assess the patentability of inventions. The management of material transfer or confidentiality agreements were performed by all the inquired TTOs in 2012 but in 2013 and 2014 10 out

![Figure 2: Percentage of TTOs whose office staff has the listed university qualification](image)

Note: In 2012 (2013-2014) survey 18 (13) TTOs responded.
Source: Own computations based on 2013, 2015 UTEN Surveys

* Even when you restrict the analysis for the 13 respondents in each year, the trend and absolute averages remain fairly the same
of 13 TTOs (83.3%) stated that they perform such activity. A large number (and percentage) of TTOs perform upstream activities in the technology transfer process including to apply for patents, to negotiate or arrange licenses, to scout for new intellectual property and new technology, or to provide training to faculty, researchers, or students (see Figure 3). Less frequently performed activities are related with more downstream activities in technology transfer process and include: manage a proof of concept fund, manage a seed fund, provide/manage a research/science and technology park or an incubator facility.

Excluding the transversal activity of raise awareness/disseminate information on intellectual property rights and entrepreneurship, the most frequent type of activities performed by Portuguese TTOs is related to upstream phases of the TT process, most notably, invention disclosures and priority filings.

In the last five year period (2010-2014), a noticeable change in the allocation of the time of technical/professional collaborators (in FTE) occurred: higher time devoted to core TTOs’ activities, most notably, licensing, intellectual property management and support services to entrepreneurship and spin offs at the expenses of grants application and fundraising activities (cf. Figure 4). This is a positive trend reflecting the concentration of TTOs on their «core business activities.»

1.2. Budget information

From 2007 to 2014 the TTOs’ average budget increased by 1.7% per year, reaching the highest average value in 2012 (332 thousand euros) and the lowest in 2008-2009 (212 thousand euros) – see Figure 5. From 2012 until 2014, it was observed a sharp decrease in the average budget, almost 10% per year.

The largest share of the budget is spent on human resources (on average, around 57% of the total expenditures for the whole period). Expenditures related with patenting experienced a noticeable decrease between 2007 and 2012, but in the last two years of the analysis its weight in total budget recovered, reaching 15.5% of the total in 2014. Expenditures devoted to raising awareness of IPR/Entrepreneurship observed a downward trend, falling more than 6 percentage points between 2007 and 2014.

Taking the revenue’s perspective of the TTOs’ budget, it is
apparent the huge dependence of TTOs on grants, particularly in 2010 and 2011, and their own institution’s contribution. These two items experienced an increase in relative share in the last three years (2012-2014), representing, over the period in analysis, respectively an average of 35% and 40% of TTOs’ total revenues. The importance of internal technical services and fees is relatively negligible, whereas the share of external technical services and fees was quite noticeable in 2011 and 2012 (about, on average 21%). Albeit small, the share in total revenues from license and option agreements observed a marked increase, from less than 1% in 2007 up to 7.2% in 2014.

Excluding the years of 2011 and 2012, the share of revenues coming from TTOs’ institutions seems to compensate the share coming from grants (see Figure 6). Together these two sources account for two quarters of the TTOs’ revenues. TTOs’ lack of financial autonomy continues therefore to constitute a serious constraint to the sustainability of TTOs’ core activities.

1.3. Intellectual Property and Commercialization
TTOs handle the bulk (over 90%) of all patent applications of their institutions. The intellectual property rights created at TTOs’ institution is in the vast majority of cases exclusively owned (11 out of 13) by the university. In two cases the intellectual property rights created at TTOs’ institution belong to both the university and the inventor.

The policy of distribution of royalties among stakeholders (e.g., the institution; the government; the inventors; others such as schools, research consortiums) is quite diversified among the TTOs. In 7 out of the 13 cases, the royalties from intellectual property at the institution is equally divided by the university and the inventor. In 4 cases the largest part of the royalties goes to the inventor. In only one case the institution receives the totality of the royalties.

The average (per TTO) number of new patent applications

**Figure 4:** Percentage of technical/professional collaborators (in full-time equivalents) allocated to the activities performed by TTO, 2010-2014
Note: It was considered, for the whole period, the 13 TTOs that responded in 2014.
Source: Own computations based on 2012-2015 UTEN Surveys
Figure 5: TTOs’ average total expenditures (in Euros) and distribution (%) by type of expenditure, 2007-2014

Note: It was considered, for the whole period, the 13 TTOs that responded in 2014.
Source: Own computations based on 2010-2015 UTEN Surveys

(priority filings) increased from 2007 to 2009 but after this latter year, with the exception of the provisional filings for patents (which is a kind of ‘lower-cost first patent filing’), all the other new patent applications observed a striking decrease (namely the Portuguese and PCT). From 2012 onwards, it is observed an increase in the average new patent application per TTO (15 in 2013 and 13 in 2014), in particular Portuguese and ‘Other’. Foreign patent applications, most notably at the European (EPO) and the US (USPTO) Patent Offices, continue to present smaller figures, around 5-6 new patents per TTO (see Figure 7).

About half of the TTOs inquired had, in 2014, patent applications in Biomedical (diagnostics, medical devices, pharmaceuticals, etc. for human and animal health) (54%) and Computers, communication equipment, and software (54%) (see Figure 8). The former (Biomedical) is the most frequent subject areas for six (46%) of the TTOs. In dynamic terms, comparing 2011 with 2014, it is noticeable that the decrease in the number of TTOs with patent applications in ‘Other subject areas’ and the increase in ‘Low or zero carbon energy technologies’ or ‘Computers, communication equipment, and software’.

The number of patents granted to the institution, through the corresponding TTO, increased markedly over the period in analysis (cf. Figure 9). Indeed, the number of patents granted in 2014 is almost the double of that of 2007. This evolution is mainly due to the Portuguese-granted patents. From 2013 until 2014 foreign-granted patents decreased, in particular those associated with the USPTO.

In each year, over 80% of the patents were granted by the Portuguese Patent Office. In 2014, 2 patents were granted by the USPTO, 2 by the EPO and 4 by the other (Brazilian, Canadian, Chilean, and Japanese) patent offices.

By the end of 2014 the respondent Portuguese TTOs possessed 1097 active patents (on average, 84 active patents per TTO). The relative weight of EPO and USPTO in active patents is,
similarly to granted patents, very small, respectively 6.7% and 5.6% (average for the period 2009-2014). As it is clear in Figure 10, the number of active patents from the Portuguese Patent Office (which includes provisional) decreased between 2011 and 2012 but increased subsequently. There was a noticeable increase in the ‘Other’ active patents handled by a diverse set of foreign patent offices, located in countries of 5 continents – America (Canada, Mexico, and Brazil), Europe (Spain, Germany), Africa (South Africa), Asia (China, Japan, South Korea), and Australia (Australia and New Zealand).

The number of licenses, option agreements, and assignments executed by TTOs evidences an irregular trend, increasing significantly over the period in analysis, from 32 in 2007 up to 81 in 2012 (see Figure 11) but decreasing also markedly from then on. In 2014, the corresponding figure (44 licenses, option agreements, and assignments executed by TTOs) is at the 2009 levels. Almost 80% of licenses, option agreements, and assignments are executed with Portuguese partners. In the last two years this share was even reinforced, being a significant fall observed in the share of executions with EU partners (which, in 2012, represented almost one third of the total licenses, option agreements, and assignments executed by TTOs).

In 2014, the majority of licenses, option agreements, and assignments that were executed by TTOs were granted to start-ups. The weight of start-ups in total licenses, option agreements, and assignments granted increased substantially from 2011 (27%) to 2014 (52%). Non start-up firms employing less than 250 collaborators represented, in that same year, 42% of the total licenses, option agreements, and assignments granted (cf. Figure 12).

The average (per TTO) amount of license income (e.g., license issue fees, annual fees, option fees, etc. plus milestone, termination, and cash-in payments) received by the institutions through their TTOs, from their intellectual property (incl., patents, software, material transfer agreements, confidentiality agreements etc.) amounted

Figure 6: Distribution (%) of TTOs’ average total revenues (in Euros) by source, 2007-2014

Note: It was considered, for the whole period, the 13 TTOs that responded in 2014.
Source: Own computations based on 2010-2015 UTEN Surveys
in 2014 to approximately 40 thousand euros, a much lower figure than that from 2012 (110 thousand euros per TTO). Notwithstanding, the weight of international licenses in total license income showed a clear increase, from 25% in 2011 up to 46% in 2014.

A quite high proportion of TTOs (10 out of 13) stated that between 2012 and 2014 at least one of their institution’s licensed technology or knowledge resulted in commercially profitable products or processes.

In 2014, each TTO executed, on average, 29 research and development (R&D) agreements between their institution and companies. This figure is almost the double of that from 2009. However, the distribution of the R&D agreements by TTO is highly and increasingly skewed: five TTOs failed to execute any R&D agreement between their institution and companies whereas three TTOs are responsible for approximately 90% of the total R&D agreements executed in 2014 (in 2009 the corresponding figure was 30%).

2. The evolution of the efficiency of Portuguese TTOs

2.1. Method and main variables

The efficiency of TTOs is computed on the basis of Data Envelopment Analysis (DEA). DEA is a non-parametric estimation technique, a mathematical programming approach that does not require the specification of a functional form for the production function (Charnes et al., 1978). It is used when there are multiple outputs and when meaningful aggregation is not possible. DEA produces an efficiency rating or score for each unit of analysis (TTO for example) by first determining the set of units which exhibit...
Figure 8: Application for patents by subject area (number of TTOs), 2014
Note: It was considered, for the whole period, the 13 TTOs that responded in 2014.
Source: Own computations based on 2010-2015 UTEN Surveys

Figure 9: Number of patents granted to the institution through the TTO, 2007-2014
Note: It was considered, for the whole period, the 13 TTOs that responded in 2014.
Source: Own computations based on 2010-2015 UTEN Surveys

3 The analysis covers the period 2007-2011 and encompasses 18 TTOs. The assistance of André Monteiro (FEP, Master in Economics of Management of Innovation) in DEA computations is acknowledged.

4 Stochastic Frontier Estimation approach (SFE) is an alternative approach to the estimation of frontier functions using econometric techniques, which allows for statistical inference, but requires restrictive functional form and distributional assumptions (Coelli et al., 2005).

5 For the most recent period, 2012-2014 we only had data for 13 TTOs.
“best practice”. These units are said to form the frontier that relates outputs and inputs. Therefore, for each unit in the sample, DEA determines whether it lies on the frontier (exhibits best practice) or, if not, how “far” from the frontier it lies. Units that lie on the surface are termed efficient and those not on the surface are said to be inefficient (Zhu, 2009). In our computations, we use constant returns to scale model – input-oriented.

Since the TTOs selected cover all the phases of the technology transfer process, we decided to include outputs that reflect these phases. Therefore, as output measures we include invention disclosures (number of invention disclosures reported by the institution to the office), priority filings (new patent applications filed by the office for the institution), patents granted (number of patents granted to the institution through the TTO), active patents (number of accumulated patents by the university), licenses executed (number of licenses, option agreements, and assignments executed by the office), license income (total amount of license income (in euros) received by the institution through the TTO from its intellectual property - patents, software, material transfer agreements, confidentiality agreements, etc.), research agreements (number of research and development agreements executed between the institution and companies through the TTO), start-ups established (number of start-ups and spin-offs established) and active start-ups (accumulated start-ups and spin-offs).

In line with the relevant literature (e.g., Siegel et al., 2003; Chapple et al., 2005; Curi et al., 2012), the input measures selected are TTO size (office collaborators, in full-time equivalents, who are involved in technology transfer services/activities) and the TTO’s total expenditure (in Euros). To
maximize the size of the sample in analysis, we restricted the model’s estimation to the period 2007 until 2011, involving 18 TTOs.

We estimated 6 distinct models. The first model (Model 1) uses the outputs ‘invention disclosures’ and ‘priority filings’ to estimate the values of efficiency, since there is a high correlation/association between these two components. The second model (Model 2) encompasses the outputs related to patents: ‘patents granted’ and ‘active patents’. Model 3 includes the outputs: ‘licenses, option agreements, and assignments executed’ and ‘license income’. Model 4 deals only with the output ‘research agreements’ and Model 5 with ‘spin-off/start-up companies established’ and ‘active spin-off/ start-up companies’. There is also a Global Model (Model 6) that aggregates all of these outputs.

For all these models we included two inputs in the efficiency computations, ‘TTO staff’ and ‘total expenditure of TTO’.

2.2. Exploratory analysis of the efficiency of Portuguese TTOs

2.1.1. Dynamics of TTOs’ efficiency: overall and by each phase of the technology transfer process

Given that the relative efficiency varies from stage to stage within the technology transfer process, it is advisable to analyze its different stages.

The mean of the overall relative efficiency reached 63.4% in 2007, increasing to 69.6% in 2011 (see Figure 14). Thus, over the period in analysis Portuguese TTOs managed to improve their overall performance. Analyzing the distinct stages of the technology transfer process (cf. Figure 14), we find that the relative performances are quite differentiated, higher for the more downstream stages (namely research agreements and spin-offs/start-ups established) than for upstream ones (invention disclosures, patents granted or licenses), especially in the beginning of the period.

Interestingly, the upstream stages, most notably invention disclosures and patents, are the ones whose relative efficiency increased more over the period. This may in part be explained by the fact that over the period in analysis, TTOs received substantial support in terms of training, awareness workshops and international internships on the matters related to intellectual property rights in general and patenting in particular through the UTEN program. The impact of these training actions and workshops are not yet visible in more downstream stages, namely license income, research agreement and spin-off activities, which show a negative trend in terms of relative efficiency over the period. This, however, indicates that continuous efforts should be put into invention disclosure and patents, as these stages feed the downstream ones, and additional, purposeful measures should be conceived to more directly improve the stage of technology commercialization, through licenses, agreements and generation of new technology-based firms.

The schemes of Figure 15 reveal the dynamics of TTO efficiency and the positioning of each unit, taking into account the initial value (2007) and the final value (2011) of the efficiency of each TTO. These schemes do not represent the variations that occur during this period, only the direction of the evolution of efficiency (positive marked by solid arrows; negative marked by dashed arrows).

Regarding the overall efficiency (1st scheme in Figure 15), the dynamic is rather positive with only four (out of 18) TTOs loosing efficiency over the period in analysis, eight TTOs became more efficient and the remaining maintained their efficiency values at the maximum (100%).

Analyzing the other schemes, we found that the TTOs gained efficiency especially in the most upstream stages of the technology transfer process – invention disclosures and priority filings.

The policies aimed at fostering IP awareness and output put forward by the Portuguese authorities in the first half of the 2000s (Cartaxo and Godinho, 2012) as well as the training/ internships and workshop activities promoted by UTEN in recent years are likely to have a contribution to this dynamic.

In contrast, in the most downstream stages – spin-off/start-up companies established – the results are not so encouraging: nine TTOs lost efficiency and just four improved their performance.

At the intermediate stages of the technology transfer process (patents, licenses and research agreements) the results are more ambiguous, with a similar number of TTOs improving and worsening their efficiency over the period in analysis.
Additionally, the improvements occurred at very low levels of efficiency and are in general small, whereas the decreases in efficiency are much more pronounced – see particularly patents granted and active patents and research agreement schemes.

Thus, in our view, the challenge for the Portuguese TTOs is to mimic the improvements occurred in the invention and disclosures (and priority filing) phase in other more downstream, adjacent commercialization stages, most notably addressing new initiatives to reverse the trend that occurs during the creation of start-ups.

2.1.2. Relation between TTOs’ efficiency and some key variables

The schemes of Figure 16 show the TTOs' relative overall efficiency, in 2011, by group of variables that may potentially be related to TTO efficiency: characteristics of TTOs, universities and regions.

Looking first at the characteristics of TTOs – TTO age and TTO size – we conclude that older TTOs tend to be the most efficient (Mean=0.920), although the relationship is not linear. Additionally, on average, smaller TTOs (by number of collaborators in FTE) are the most efficient (Mean=0.915), revealing that the smaller the size of the TTO, the more efficient.

Analyzing the characteristics of universities, we can see that TTOs associated with universities with science parks and medical schools are, in general and on average, more efficient.

In terms of the size of the university, there is a positive linear relationship, meaning that TTOs associated with larger universities are, on average, more efficient.

TTOs associated with universities with a lower number of accumulated patents and publications per researcher are less efficient, although in the case of patents, the picture is not so clear cut.

Additionally, the TTOs associated to universities with a lower proportion of R&D centers classified as excellent are also less efficient.

Finally, analyzing the region’s characteristics where TTOs are located, we find a positive linear relation between TTO efficiency and the region’s level of development and share of new high-and medium-tech (HMT) firms. Thus, on average, and in an exploratory manner, we could say that TTOs located in highly developed regions and regions with a high concentration of new HMT firms are more efficient.

On the other hand, TTOs located in regions with high concentration of manufacturing firms are less efficient.

Figure 14: Box plots of TTO relative efficiency in 2007 and 2011

Note: The box plots produced consist of the most extreme values in the data set (maximum and minimum values), the lower and upper quartiles, and the median (the bold line). The spacing between the different parts of the box indicates the degree of dispersion (spread) of the variables. The individual values shown represent the outliers.

Source: Own computations based on data gathered directly from 18 Portuguese TTOs.
Figure 16: Dynamics (2007-2011) of TTOs relative efficiency
Source: Own computations based on data gathered directly from 18 Portuguese TTOs.
Figure 17: TTO relative overall efficiency (2011) by group of variables concerning the characteristics of TTOs, Universities and Regions

Source: Own computations based on data gathered directly from 18 Portuguese TTOs.
References


Global Startup Orientation Week
Acceleration class of 2016
Austin, Texas, February 1-5

An initiative of

The University of Texas at Austin
IC² Institute
Office of the Vice President for Research

In collaboration with

UTEN Portugal
UT Austin Portugal
University Technology Enterprise Network

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AGENDA

February 1, 2016 (Monday): IC² Institute Central

08:30-09:00am Welcome session (Global Classroom)
   Introductions
   Welcome remarks and intro to the Global Startup Program (GSP):
     Robert A. Peterson, IC² Institute Director
     Marco Bravo, IC² Institute Project Director

Pitch Competition to GSP team (Global Classroom) (Each team:10 min presentation, +20 min discussion)

09:00-10:00am CleanTech Sector (Global Classroom)
   - Watt-IS
   - BeMicro

10:00-10:30am Break

10:30-11:30am Data Analytics and Industrial Application Sector (Global Classroom)
   - Ciengis
   - Cool Farm

11:30-12:00pm Break and Lunch (Global Classroom)

12:00-02:00pm eCommerce and B2C Sector (Global Classroom)
   - Findster
   - Petable
   - BeeVeryCreative

2:00-02:30pm Break
02:30-04:00pm  **Healthcare Sector** (Global Classroom)
- PeekMed
- SWORD Health
- doDOC

04:00-08:00pm  
**GSP Team work with companies to revise pitches, plan meetings and calls**

Pizza celebration

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**February 2, 2016 (Tuesday): IC² Institute Central**

09:00-10:00am  **Success Committee Mastermind** (Global Classroom), led by Christopher Meyers
**CleanTech Sector**
- Watt-IS
- BeMicro

10:00-10:30am  Break

10:30-11:30am  
**Success Committee Mastermind** (Global Classroom), led by Bruce Flory
**Data Analytics and Industrial Application Sector**
- Ciengis
- Cool Farm

11:30-12:00pm  Break and working lunch (Global Classroom)
**AGENDA**

12:00-02:00pm  **Success Committee Mastermind** (Global Classroom), led by Donovan Miller
  **eCommerce And B2C Sector**
  - Findster
  - Petable
  - BeeVeryCreative

02:00-02:30pm  Break

02:30-04:00pm  **Success Committee Mastermind** (Global Classroom), led by Rodney Klassy
  **Healthcare Sector**
  - PeekMed
  - SWORD Health
  - doDOC

04:00-04:30pm  Break

04:30pm  **Debrief**

February 3, 2016 (Wednesday): IC² Institute Central

All day Meetings and calls with potential US partners (Austin region/IC² Institute Central, Idea room)

06:00pm  Pub Crawl Music (optional)
AGENDA

February 4, 2016 (Thursday): IC² Institute Central

All day Meetings and calls with potential US partners (Austin region/IC² Institute Central, Idea room)

07:00-9:00pm  **Austin Startup Community Immersion event** (Capital Factory)

February 5, 2016 (Friday): IC² Institute Central

09:00am-12:30pm  Meetings and calls with potential US partners  
(Austin region/IC² Institute Central, Idea room)

12:30-02:00pm  Working lunch (Idea room)

02:00-04:00pm  **Summary**: Joint learning and next steps

Notes

- For meetings you may dress business casual (tie is optional).
- Marco’s cellphone: +1 512-422-8940

- Addresses:
  IC² Institute Central (2815 San Gabriel Street, Austin, TX 78705)
  Capital Factory (Austin Centre Executive Suites, 701 Brazos Street, Austin, TX 78701)

- Webpages:
  http://utenportugal.org/
  http://utenportugal.org/global-startup-program/
  http://ic2.utexas.edu/
  http://ati.utexas.edu/
UTEN Global Startup Program

Welcome to the UTEN GSP Orientation Week! We believe the events scheduled will help reduce risk, open markets, and connect a select group of Portuguese technology-based companies with professionals in the Austin entrepreneurial ecosystem to help grow these companies globally, particularly in the United States.

The IC² Institute has a collective experience in global technology commercialization, entrepreneurship, innovation, incubation, and acceleration of almost 40 years. Our business development team closely works with international entrepreneurs in adding value to their businesses, including our team at the Austin Technology Incubator (ATI). ATI is one of the first technology incubators in the United States, and has been creating a tremendous value for companies and society for almost 27 years.

The Global Startup Program (GSP) grew out of the University Technology Enterprise Network (UTEN), itself a part of the long-standing UT Austin|Portugal partnership between the IC² Institute at The University of Texas at Austin and the Portuguese Science and Technology Foundation (FCT). UTEN’s goal is to lead, facilitate, and accelerate the commercialization of science and technology innovations created by Portuguese researchers. Based on a vision to become a network connecting universities, technology transfer offices, research laboratories, incubators, and professionals in Portugal, UTEN has grown into a leading training, incubation, acceleration, and business development program bridging the gap between early-stage innovations and the global marketplace.

Supported by the FCT, the IC² Institute launched the Global Startup Program in 2013 to provide business development, soft landing, incubation, and acceleration opportunities for Portuguese technology-based startups in global markets. Participating ventures benefit from physical co-location space and feet-on-the-ground mentorship in Austin from an experienced team of business developers. The Program's tangible outcomes speak for themselves: to date, firms in the program have had a direct economic impact of more $82 million in Portugal, through capital acquisition in the United States and sales, trials, and distribution agreements in the United States, India, the SAARC Countries, and China.

Held from February 1st to 5th, this year’s Orientation Week will bring to Austin the leaders of eight of the most promising Portuguese technology ventures carefully selected from among dozens of applicants to be part of the class of 2016, and will promote soft-landing learning and facilitate networking and matchmaking among entrepreneurs, major corporations, venture capital firms, angel investors, incubator directors, and international service providers interested in actionable knowledge about doing business in the United States and in particular the process of going global.

We are excited to host this entrepreneurial initiative and hope you find it useful!

Dr. Robert A. Peterson, Director, IC² Institute, The University of Texas at Austin
Marco Bravo, Project Director, IC² Institute, The University of Texas at Austin
“UTEN started by building a country-wide network of technology transfer experts and later evolved to become a hugely successful soft-landing hub for Portuguese technology-based companies dreaming to go global”.

Marco Bravo, IC² Institute Program Director
PORTUGUESE COMPANIES
PORTUGUESE COMPANIES

CleanTech Sector

» Watt-IS
» Be Micro

Data Analytics and Industrial Application Sector

» Ciengis
» Cool Farm

eCommerce and B2C Sector

» Findster
» Petable
» BeeVeryCreative

Healthcare Sector

» PeekMed
» SWORD Health
» doDOC

Other Companies participating in the program

» Celfinet.
» WY Group
» Eyesee
» Biopremier
» Dognaedis
» Veniam
» Xhockware
» Whale
Watt-IS
http://www.watt-is.com/

“Watt-IS (Watt Intelligent Solutions) is a Portuguese company focused on promoting energy efficiency in households and Small and Mediums sized Businesses (SMBs) through the development of an intelligent and self-learning data analytics engine that interprets and reasons on smart metering data and automatically generates tailor made energy efficiency measures for each specific consumption profile. Coupled with an easy to use web-based user engagement platform Watt-IS is able to generate value both to utility companies (by increasing user satisfaction and reducing churn rates in highly competitive markets), Energy Service Companies (helping them achieve and monitor energy saving goals on their performance contracts) and final energy consumers (helping them save on their energy bill and adopt more rational usage of resources).”

Miguel Carvalho
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BeMicro
http://www.beonenergy.com/

Founded in 2015 by Rui Rodrigues and Jose Marcal, BeMicro operates mainly in Smart Energy. BeMicro’s main product is the BEON microinverter, a small device that is attached to a Solar panel and allows it to be directly connected to a wall socket plug to start producing your own energy right out of the box and within 30 minutes. The company has introduced a unique system that allows the microinverters to be controlled to guarantee excess production. To help customers save money, the system is also able to control consumption and disconnect devices if the energy production from renewable sources is insufficient.

The BeON energy produces the world’s first energy converter that allows a solar panel to be connect directly to a wall socket, turning solar in to a DIY product. With this device anyone can produce green energy within minutes and at much lower costs! BeON also has R&D in smart-home neuronal networks and ultra-portable batteries.

Rui Rodrigues
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Ciengis is a process systems engineering company that provides nonlinear and real-time process performance optimization system Multiverse and advanced control solution Plantegrity to the chemical and petrochemical industry.

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CoolFarm is an integrated, intuitive and proactive control system compatible with all horizontal/vertical greenhouses and warehouses. Everything that sensors can measure, CoolFarm can analyze and activate the right measures to achieve efficient plant growth and maximize profitability. CoolFarm is the all-in-one system centered on plants needs.

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Findster
https://www.getfindster.com/

Findster is the Fitbit of location systems - The same way Fitbit democratised the access to activity trackers, Findster is democratizing the access to location systems. We developed a proprietary communication protocol that allowed us to create the first GPS tracker free of monthly fees - for kids and pets. Compared with Findster, the existing solutions are up to 10x more expensive over 2 years.

André Carvalheira
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Petable is a preventive pet healthcare platform composed by a mobile app for pet owners, and a backoffice platform for veterinarians. We create reminders, integrate them with the right incentives and enable a truly global vision of the pets life (that includes wearables and smart devices integration), creating a new way for owners, veterinarians, vet clinics and other players to really handle the most important things, and changing families lives one pet at a time.

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BEEVERYCREATIVE
https://beeverycreative.com/

BEEVERYCREATIVE is determined to be at the vanguard of the desktop 3D printing business and to push forward this powerful technology eager to be discovered. We are committed to develop, deliver and generate user-friendly solutions with innovative approaches and exceptional quality and design.

Aurora Baptista
Chief Executive Officer
abaptista@beeverycreative.com

Jenny Fresco
Account Manager-International
jfresco@beeverycreative.com
A pre-operative orthopedic surgical planning software, where the orthopedic surgeon can analyze the surgery’s impact using a powerful 3D environment.

PeekMed
http://www.peekmed.com/

João Pedro Ribeiro
Chief Executive Officer
joao.ribeiro@peekmed.com

Sara Silva
Chief Operating Officer
sara.silva@peekmed.com
SWORD Health

http://swordhealth.com/

SWORD Health is a healthcare startup that is reinventing physical rehabilitation through the combination of science-driven therapeutic methods with effective technologies that facilitate dissemination of care. To solve the dependence of current rehabilitation models on specialized human resources, which are costly, scarce and non scalable, SWORD Health has developed SWORD Phoenix, a system that combines portable motion sensors and powerful software allowing a cost-effective approach to rehabilitation. SWORD Health has been endorsed by the European Commission as one of the most innovative companies.
doDOC
http://www.dodoc.com/

doDOC helps biotechnology and pharmaceutical companies streamline regulatory documents, ensuring auditability and compliance. This means, organizations gain control and oversight of their documentation practices down to sentence/word level. With doDOC, organizations can unify their research and regulatory documentation, by restructuring old documents, extracting meta information and creating new documents/reports that are fully compliant with FDA and ISO regulations.

Federico Cismondi
Chief Executive Officer
cismondi@dodoc.com

Paulo Melo
Chief Product Officer
pmelo@dodoc.com
Celfinet
http://www.celfinet.com

Celfinet, created in 2003, focuses on technical consultancy services and solutions for telecommunications companies. Its primary product, Vismon Intelligence, is a Multivendor Network Performance Manager based on BSS counters that is tailored to GSM/DCS, UMTS and LTE technologies. It statistically monitors information collected directly from the main network elements, and enables close inspection of the major QoS offenders, identifying network trouble spots and setting up and implementing correction measures. Celfinet is headquartered in Lisbon, Portugal and the business development efforts are being led by Luis Varela and Alexandre Victorino.
Bliss Application

http://www.blissapplications.com/

Bliss Applications is a mobile software development consultancy, developing services and products for a growing market of mobile-driven economies. WYGroup company started in 2002 as a digital marketing agency. The company evolved into a group in 2007 by capturing new technologies that could be used for marketing, that lead to the creation of Bliss Applications in 2009, with a focus on developing software and apps for what was thought to be a great market. From its inception the group maintained the same management board and the same leadership in the mobile consultancy business unit. Pedro Janela is CEO of WYgroup, and André Gil is Managing Partner of Bliss Applications.
Headquartered in Lisbon, Portugal, and led by André Pimentel and João Redol, **EyeSee** is a revolutionary solution that engages viewers and allows brands to seamlessly integrate in-stream ads and in-image ads in premium content. EyeSee has developed a patent-protected technology that automatically inserts context-relevant ads: No need for human intervention, making it easy and scalable for publishers.
BIOPREMIER
http://biopremier.com/

Led by Pedro Antunes, BIOPREMIER develops DNA-based diagnostic solutions for several sectors, namely agro-food, veterinary, environmental and clinical. The company has developed techniques that are unique in the world, both in service and product format - speciation, fraud detection and DNA-based microbiology. The company began the monetization efforts of their developments in 2012, starting with food quality and fraud control within the Portuguese market. Today the company works with clients all over the EU and is starting to internationalize beyond its borders (US, Brazil, and Mexico, for example). Biopremier's services and products are used mainly in the agro-food sector, from private firms (retailers, producers and laboratories) to governmental fraud control agencies. The company’s competitive advantage is its unique technology for food-fraud detection through DNA as well as a lean cost structure. Biopremier aims to be an international reference of innovation and development for molecular diagnosis products by becoming a molecular biology center of reference. The company is focused on innovation, offering products and services in the fields of molecular biology, for the agrifood, environmental, human clinical and animal health industries.

Pedro Antunes, Chairman of the Board
pantunes@biopremier.com
Focused on information security, DOGNÆDIS was created by a team of researchers from CERT-IPN and University of Coimbra. Francisco Rent and team were previously at the origin of CSIRT (Computer Security Incident Response Team), the CERT-IPN, hosted at the Instituto Pedro Nunes, a technology transfer interface created by the University of Coimbra in Portugal. After five years of activity, and due to the increasing success and positive feedback from several private and government organizations, DOGNÆDIS started as a private company, aiming to be at the forefront of security technologies. To reach such an endeavor, the company is devoted to bringing information security to organizations and individuals through excellence in innovative solutions.

Francisco Nina Rente, CEO
frente@dognaedis.com

Sérgio Alves, Partner
salves@dognaedis.com
VENIAM is building the Internet of Moving Things. It turns vehicles into Wi-Fi hotspots and builds city-scale vehicular networks that expand wireless coverage and collects terabytes of urban data. In controlled spaces such as ports and container terminals, Veniam's game-changing solutions ensure that all mobile workers and assets are securely connected, no matter where they are or at what speed they are moving. Its hardware, software, and cloud components are running in the world's largest network of connected vehicles, including taxis, waste collection trucks and an entire public bus fleet in Porto, Portugal, offering free Wi-Fi to more than 260,000 active customers. Veniam is backed by leading venture capital firms, with offices in Silicon Valley and Porto, Portugal.

Manuel Simas, VP Sales
msimas@veniam.com
Led by João Rodrigues, CEO, and João Neiva, COO, XHOCKWARE is a tech company based in Porto focused on developing innovative retail solutions. The company’s first product is YouBeep, a mobile checkout solution designed to end waiting lines at checkout. The solution is based on two components, a mobile app and patented pluggable device, compatible with all POS, requiring no integration. YouBeep is a product for retailers worldwide, especially grocers/supermarkets, wanting to improve customer satisfaction and save money.

**YouBeep (product)**

YouBeep is a mobile checkout solution designed with top retailers in mind, providing them and their customers with an innovative mobile shopping tool compatible with every POS in the world without any software integration.

Since its launch at two leading retailers in Europe, Lidl (Germany) and Pingo Doce (Portugal), Youbeep was able to achieve 10% store transactions, make the average YouBeep checkout three times faster than regular ones, increase basket size by 15% of the transations, and give meaningful shopper insights.

**Animated video:** https://www.youtube.com/watch?v=gkwIMF27mqU

**Morrisons Demo with coupons/promotions:** https://www.youtube.com/watch?v=kDLk1CHW8cY

---

**XHOCKWARE**

Xhockware.com

João Neiva, COO, Co-founder

David Sobrinho, CMO

j.neiva@xhockware.com
david.sobrinho@xhockware.com
Clientscape is a SaaS that runs over a private elastic cloud, exclusively used by a single brand. We identify a brand’s customers on social media by matching their existing CRM ID with their social media profiles and other digital presences (Facebook, Twitter, e-mail, web analytics and mobile). All this is done through a highly accurate customer self-identification method leveraged through social login and proprietary tracking systems.

Advantages on the customer care side:
(decrease operational costs and increase qualification)
- Reduce Customer Care SLA’s
- Increase customer qualification -> leverage loyalty = reduce customer retention cost.
- Operator efficiency > 800% compared to traditional call center + generates qualified data

Advantages on the Marketing or Sales side:
(increase customer retention, drive loyalty, sales and acquire similar customers)
- All customer opt-ins are 100% legally compliant due to legal enforcement framework
- Through a known customer base identified on social media it becomes possible to target similar potential-customer profiles, thus increasing their CTR and reducing their CPA.
- Customer Retention costs < 45% and customer acquisition costs < 80%

Advantages on the IT infrastructure and data security side:
Since Clientscape runs on a private cloud exclusively dedicated to each brand, data security and data sharing do not pose any threat or risk of undesired data violation or breach.

Paul Antony, CEO & Founder
paul.antony@clientscape.com
UTEN GSP Orientation Week
class of 2016|2017
Austin, Texas, November 14-18
Participant Roster
Welcome to the 2016-17 UTEN GSP Orientation Week! We believe the events scheduled will help reduce risk, open markets, and connect a select group of Portuguese technology-based companies with professionals in the Austin entrepreneurial ecosystem to help grow these companies globally, particularly in the United States. The UT Austin GSP team has extensive experience in global technology commercialization, entrepreneurship, innovation, incubation, and acceleration. We closely work with international entrepreneurs in adding value to their businesses.

The Global Startup Program (GSP) grew out of the University Technology Enterprise Network (UTEN), itself a part of the long-standing UT Austin|Portugal partnership between The University of Texas at Austin and the Portuguese Science and Technology Foundation (FCT). UTEN's goal is to lead, facilitate, and accelerate the commercialization of science and technology innovations created by Portuguese researchers. Based on a vision to become a network connecting universities, technology transfer offices, research laboratories, incubators, and professionals in Portugal, UTEN has grown into a leading training, incubation, acceleration, and business development program bridging the gap between early-stage innovations and the global marketplace.

Supported by the FCT, the UT Austin team launched the Global Startup Program in 2013 to provide business development, soft landing, incubation, and acceleration opportunities for Portuguese technology-based startups in global markets. Participating ventures benefit from physical co-location space and feet-on-the-ground mentorship in Austin from an experienced team of business developers. The Program's tangible outcomes speak for themselves: to date, firms in the program have had a direct economic impact of more $82 million in Portugal, through capital acquisition in the United States and sales, trials, and distribution agreements in the United States, India, the SAARC Countries, and China.

Held from November 14th to 18th, this year's Orientation Week will bring to Austin the leaders of twelve of the most promising Portuguese technology ventures carefully selected from among dozens of applicants to be part of the GSP class of 2016-17, and will promote soft-landing learning and facilitate networking and matchmaking among entrepreneurs, major corporations, venture capital firms, angel investors, incubator directors, and international service providers interested in actionable knowledge about doing business in the United States and in particular the process of going global.

Welcome to Austin! We are excited to host this entrepreneurial initiative and hope you find it useful!

Dr. Robert A. Peterson, Principal Investigator, UT Austin-Portugal Program
Marco Bravo, Executive Director, UT Austin-Portugal Program
Organized by The University of Texas at Austin:

Christopher Meyers
Bruce Flory
Marco Bravo
Dr. Robert A. Peterson
Rodney Klassy
# AGENDA

**Monday, November 14th, 2016: IC² Institute Central, 2815 San Gabriel St. Austin, TX**

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
</table>
| 9:00-9:20am| Welcome session | Introductions | Global Startup Program (Global Classroom)  
              | **Marco Bravo**, Project Director                                   |
| 9:30-1:00pm| Company Pitch Dry Run and Feedback Sessions                          |
| 1:00pm     | Working lunch                                                    |
| 2:00pm-onwards| Breakout Sessions                        |
|            | Re-working of Pitch Decks and 1:1 Coaching | Mentoring in prep for Tuesday |

**Tuesday, November 15th: MasterMind Success Committee Pitch Day**  
*(all day, AT&T Executive Center | University of Texas at Austin, room 102)*

<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:30-9:00am</td>
<td>Registration and continental breakfast</td>
</tr>
<tr>
<td>9:00 am-12:30pm</td>
<td>Venture Pitches, IT, Software, Mobile</td>
</tr>
<tr>
<td>12:30-1:30pm</td>
<td>Buffet Lunch</td>
</tr>
<tr>
<td>1:30-5:00pm</td>
<td>Venture Pitches, BioScience</td>
</tr>
<tr>
<td>5:00-5:30pm</td>
<td>Debrief</td>
</tr>
<tr>
<td>5:30-7:00pm</td>
<td>Cocktail</td>
</tr>
</tbody>
</table>
Wednesday, November 16th: IC² Institute, 2815 San Gabriel St. Austin, TX

9:00am  Combinations of 1:1 Breakout Sessions on topics such as:
- Building a Venture Investment Plan and Pitch
- Building | Refining your North American Launch Plan and Sales Campaign
- Coaching | Mentoring with UTEN team or other Know-How Experts on Go to Market Strategy, Product | Market Fit, etc.
- Or 1:1 outside meetings for Market Validation, Customer Discovery, or Alliance | Partnerships

12:30-2:30pm  Tour to Capital Factory (701 Brazos St), followed by discussion on Capital Acquisition

Thursday, November 17th: IC² Institute, 2815 San Gabriel St. Austin, TX

9:00am  Same as Wednesday agenda; with more emphasis on outside customer | partner engagement or 1:1 meetings within | around greater Austin Metro region, or on Skype | Web Conference Calls

6:30pm  Group UTEN Dinner at County Line BBQ at the Lake (5204 FM 2222, Austin, TX)

Friday, November 18th: Austin region | IC² Institute Central

am  Same as Thursday agenda

1pm  Working Lunch (Idea Room)

2pm  Group Huddle | Debrief | Learnings | Feedback

3:30pm  Conclusion | Departures or Local Happy Hour (On your own)

NOTES:
1. For meetings you may dress business casual (tie is optional).
2. Marco’s cellphone: 512-422-8940
3. Web:
   http://utenportugal.org/
   http://utenportugal.org/global-startup-program/
BeMicro
http://www.eyeseesolutions.com/

Founded in 2015 by Rui Rodrigues and Jose Marcal, BeMicro operates mainly in smart energy. BeMicro’s main product is the BEON microinverter, a small device that is attached to a solar panel and allows it to be directly connected to a wall socket plug to start producing your own energy right out of the box and within 30 minutes. The company has introduced a unique system that allows the microinverters to be controlled to guarantee excess production. To help customers save money, the system is also able to control consumption and disconnect devices if the energy production from renewable sources is insufficient.

The BeON microinverter is the world’s first energy converter that allows a solar panel to be connect directly to a wall socket, turning solar into a DIY product. With this device anyone can produce green energy within minutes and at much lower costs! BeON also has R&D in smart-home neural networks and ultra-portable batteries.
CrowdProcess is the data science company behind James, a software for credit risk modeling based on state of the art machine learning algorithms and techniques. James was created to enable Risk Officers to easily emulate the best modeling practices without investing strongly in R&D and training.

For institutions that do not possess their own risk team or statisticians, CrowdProcess can use James to create risk models based on their historical data (past loan performance) and feed their decision engines with a probability of default, similar to what one could get with FICO but tailored to the bank and with an higher accuracy.

As part of James’s sales cycle, CrowdProcess has been showcasing it at different financial institutions and pitting it against the incumbent models. The results have been overall very positive and James has produced models that reduce losses by 12% and add an extra lending potential of 4% on average. This has led to its deployment in two clients: Cofidis (part of Crédit Mutuel) and EVO Banco (owned by Apollo Global Management).
ImpacTrip is a tour operator which promotes Responsible Tourism in Portugal.

We allow travelers to discover Portugal on a responsible and unforgettable trip that combines the best of traveling like a local with volunteering experiences in social and environmental projects which have a real impact.

Our clients are looking to meet new people, get involved with the locals and absorb Portuguese culture but, more than that, they want to have a positive contribution and have a meaningful experience.

We make this process simpler, safe and supported for young volunteers that are looking for this international meaningful experiences.

Rita Marques
Co-Founder and CEO
rita.marques@impactrip.com

Diogo Areosa
Co-Founder and CEO
diogo.areosa@impactrip.com
LaserLeap Technologies

LaserLeap Technologies is a cutting-edge non-drug and drug transdermal delivery company founded to address the need for a painless method of delivering formulations and drugs through the skin to promote faster, more effective treatments.

LaserLeap has developed the LL Dermal system which is based on the generation of high-frequency ultrasounds using a portable laser and piezophotonic materials that efficiently converts light pulses into pressure waves capable of temporarily changing the skin structure to facilitate the delivery of formulations and drugs through the skin. It is in the early stages of commercialization of its proprietary hyaluronic acid and whitening agents solution for the aesthetic market classified under the category of safe, non-invasive and effective treatments.
Loqr
https://loqr.io

Loqr Authentication as a Service platform preemptively avoids fraud in financial transactions by continuously accessing risk based on reliable client authentication, behavior and context, using their smartphones.

Ricardo Costa
CEO
r@loqr.io
Nuada is a system designed to help people with lack of strength or pain in their hand. It returns hand function by allowing users to hold heavy objects with their hands completely relaxed. It’s a unique enhancement technology that aims to be an everyday essential wearable that people even forget they are wearing.

Carlos Serpa
Founder and CEO
filipeq@nuada.pt
Perceive3D (P3D) is a Portuguese start-up company, founded in 2013. P3D builds on advanced knowledge in computer vision to offer innovative embedded image-software features for improving visualization and assisting surgeons during minimally invasive surgery (MIS). From 2013 to 2015, P3D has been focused on developing its first product - in.sight – that is a software application that processes endoscopic video in real-time to provide unique image enhancement features with applications in arthroscopy, laparoscopy and gastroenterology. The enhancement features include: radial distortion removal, dark regions brightener, contours enhancer and anatomical parts highlighter. The in.sight is just the first step of P3D’s much broader vision for the future of CAOS (Computer Assisted Orthopedic Surgery) that consists in a complete family of image-software applications for guiding the surgeon throughout different arthroscopic procedures. P3D has recently developed a unique CAOS software solution: the in.nav. The first real-time surgical navigation system that can be effectively used during arthroscopy.

João Barreto  
Co-Founder and CEO  
jpbar@perceive3d.com

Rui Melo  
Co-Founder and CTO  
rmelo@perceive3d.com
Perfommetric is a real-time monitoring system that effectively manages mental fatigue in a noninvasive and non-intrusive way. With its machine learning techniques, Perfommetric's patent pending system quietly runs in the background and analyzes user interaction patterns with the computer, identifying behavioral changes potentially related to mental fatigue.

Perfommetric is a solution for companies looking to reduce stress, improve mental health, improve alertness and boost performance of their employees. This translates into positive impact on the organization’s productivity as well as an increased quality of life and better health of the employees.
MASDIMA is a Portuguese software development company, focusing on the management of airline Irregular Operations.

MASDIMA is the first Industry 4.0 system (4th industrial revolution) for the airline OCC, which is characterized by the degree of automation, autonomy and intelligence. It brings to the OCC technology that is used in other domains with great success (manufacturing for example).

MASDIMA is a disruptive technology, awarded by 115 Airlines Representatives on the AGIRFORS airline operations 2015 with the Best Innovation Award. All the other vendors were there (Jeppesen, Sabre, Lufthansa System, IBS, etc) presenting their systems as well.

The research behind the MASDIMA technology has received two additional awards: Best 2014 Portuguese PhD thesis (from Portuguese Association for Artificial Intelligence) and second best research with practical utility from the German Fraunhofer Research Institute.

MASDIMA was founded in 2014 by António Castro, Ph.D. in Informatics Engineering, Paulo Maia, MBA and B.Sc. in Computer Science and Ana Paula Rocha, Ph.D. in Electrical and Computers Engineering.
Shelf.ai brings the power of artificial intelligence to e-commerce. With Shelf.ai, customers of grocery retailers engage in a conversation and do their supermarket shopping lists and other retail related activities simply by saying the products they want - to their smartphones.

Voice recognition, machine learning and AI-powered deep knowledge on the retailer’s product range and customers’ past behavior ultimately improve the usability of smartphones and customer satisfaction for online shopping, resulting in lower rates of shopping cart abandonment and higher sales for retailers.

Shelf.ai is a spin-off by Xarevision, a company with over ten years’ experience working on retail oriented solutions, artificial intelligence, wearables, mobile, business intelligence, analytics and big data, among other software solutions, mostly for brick & mortar retailers. Shelf.ai draws on Silvio’s and Norberto’s over 30 years’ joint experience in retail and artificial intelligence, and Xarevision’s pool of knowledge and enterprise software experience.
Sphere Ultrafast Photonics offers the new generation of products/services in the ultrafast pulsed laser regime: completely new devices based on patent-pending technologies enabling high performance measurement and control of ultrafast laser systems.

Ultrafast lasers emit the fastest and brightest flashes (or pulses) of light ever produced, with durations in the femtosecond (fs) range (1 fs = 0.000 000 000 000 001 seconds). This unique characteristic makes these lasers very important for applications in medicine and industry. In ophthalmology, they are used in the diagnosis and treatment of retinal and corneal pathologies. They are also invaluable for high quality and precision micromachining of materials, such as drilling tiny holes for speakers in modern laptops.

A general requirement that must be satisfied in order to use this type of laser, with high quality and precision in all aforementioned applications, is the necessity of an additional measurement and control system for the laser pulse (for measuring the temporal profile duration and compressing the pulse if necessary). In this context, the objective of this project is to launch into the market a very disruptive device.
TOPDOX Platform is the ultimate file access and sharing solution for mobile that honours company’s current infrastructures. No migrations. If you think about file sync & share, you think of Dropbox and similar solutions like Google Drive or OneDrive. Dropbox changed the way we keep files in sync and it’s the best solution at personal level. But for big companies, migrating to a cloud storage solution is a huge pain. We want to disrupt Dropbox (and other solutions alike) in the business space, since we envision a corporate world where teams can work together in an easy, fast and secure way.
### SUCCESS COMMITTEE MASTERMIND

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andrew Donoho</td>
<td>Donoho Design Group</td>
</tr>
<tr>
<td>Bart Bohn</td>
<td>Austin Technology Incubator (ATI), IC² Institute, UT Austin</td>
</tr>
<tr>
<td>Bill Wilson</td>
<td>Reiter, Brunel &amp; Dunn</td>
</tr>
<tr>
<td>Bob Little</td>
<td>Advanced Discovery</td>
</tr>
<tr>
<td>Carlos Kemeny</td>
<td>UT System</td>
</tr>
<tr>
<td>Donovan Miller</td>
<td>I-Corps IC² Institute</td>
</tr>
<tr>
<td>Elaine Jones</td>
<td>EJJ Associates</td>
</tr>
<tr>
<td>Gregg Parnell</td>
<td>Startmeupper</td>
</tr>
<tr>
<td>Irene Bond</td>
<td>IC² Institute, UT Austin</td>
</tr>
<tr>
<td>Isaac Barchas</td>
<td>Austin Technology Incubator (ATI), IC² Institute, UT Austin</td>
</tr>
<tr>
<td>Jim Vance</td>
<td>IC² Institute, UT Austin</td>
</tr>
<tr>
<td>Liz Wiley</td>
<td>Consulate general of France in Austin</td>
</tr>
<tr>
<td>Louise Epstein</td>
<td>Cockrell School of Engineering, UT Austin</td>
</tr>
<tr>
<td>Marlon Machado</td>
<td>IBM</td>
</tr>
<tr>
<td>Nishi Viswanathan</td>
<td>Dell Medical School, UT Austin</td>
</tr>
<tr>
<td>Pat McGettigan</td>
<td></td>
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<tr>
<td>Phil Mogavero</td>
<td>PCM</td>
</tr>
<tr>
<td>Rich Giandana</td>
<td>Business expert</td>
</tr>
<tr>
<td>Richard Amato</td>
<td>IC² Institute, UT Austin</td>
</tr>
<tr>
<td>Ruben Rathnasingham</td>
<td>Dell Medical School, UT Austin</td>
</tr>
<tr>
<td>Rudy Garza</td>
<td>G51</td>
</tr>
<tr>
<td>Tom Gardner</td>
<td>Military Healthcare Research Foundation</td>
</tr>
<tr>
<td>Stuart Bosley</td>
<td>Quantcast</td>
</tr>
<tr>
<td>Steve Nichols</td>
<td>Cockrell School of Engineering, UT Austin</td>
</tr>
<tr>
<td>Travis Froehlich</td>
<td>One Bar Ranch</td>
</tr>
</tbody>
</table>
Chris Meyers
International Business Development
GSP Portugal

Bruce Flory
International Business Development
GSP Portugal

Marco Bravo
Co-PI UT Austin-Portugal Program
Executive Director NSF SWICORPS Node
Project Director, UT Austin

Robert A. Peterson
PI UT Austin-Portugal Program
John T. Stuart III Centennial Chair in Business Administration

Rodney Klassy
International Business Development
GSP Portugal
UTEN Global Startup Program

Three Information Outreach Workshops

2016 – (Fall)

October 20, 2016

James E. Jarrett, Ph.D.
Bureau of Business Research
IC² Institute
Introduction

The three workshops were held in September 2016. Pertinent information is shown in Table I for individuals, and in Table II, for companies1.

**TABLE I.**
Number of Individual Participants, Number of Survey Respondents, Response Rates by Locations

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Individuals</th>
<th>Respondents</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisbon—15 September</td>
<td>14</td>
<td>13</td>
<td>93%</td>
</tr>
<tr>
<td>Coimbra—20 September</td>
<td>20</td>
<td>17</td>
<td>85%</td>
</tr>
<tr>
<td>Braga—22 September</td>
<td>32</td>
<td>24</td>
<td>75%</td>
</tr>
<tr>
<td>Totals For Three Workshops</td>
<td>66</td>
<td>54</td>
<td>82%</td>
</tr>
</tbody>
</table>

**TABLE II.**
Number of Companies, Number of Survey Respondents, Response Rates by Locations

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Companies</th>
<th>Respondents</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lisbon—15 September</td>
<td>7</td>
<td>7</td>
<td>100%</td>
</tr>
<tr>
<td>Coimbra—20 September</td>
<td>8</td>
<td>7</td>
<td>88</td>
</tr>
<tr>
<td>Braga—22 September</td>
<td>17</td>
<td>16</td>
<td>94%</td>
</tr>
<tr>
<td>Totals For Three Workshops</td>
<td>32</td>
<td>30</td>
<td>94%</td>
</tr>
</tbody>
</table>

Responding companies by technology area are shown in Table III.

**TABLE III.**
Responding Companies by Technology Area

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Percent</th>
<th>Response Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>ICT/Software/Web</td>
<td>46.6%</td>
<td>14*</td>
</tr>
<tr>
<td>Biotech/Health Sciences/Medical Devices</td>
<td>20.0%</td>
<td>6</td>
</tr>
<tr>
<td>Tourism</td>
<td>6.6%</td>
<td>2</td>
</tr>
<tr>
<td>Energy/Clean technology</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Manufacturing</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Physical Science/Material Science</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Electronics &amp; Automation</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Social Network</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Entertainment</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Cosmetics (Tech-based)</td>
<td>3.3%</td>
<td>1</td>
</tr>
<tr>
<td>Finance/Business</td>
<td>0.0%</td>
<td>0*</td>
</tr>
</tbody>
</table>

*Note that one company respondent said the company was ICT/Software/Web and a second company respondent said company was Finance/Business.

General Evaluation

Three questions elicited summary-type reactions about the workshops from participants. Results are shown below in Tables IV, V, and VI.

**TABLE IV.**
Question: Overall, how well did the GSP Workshop meet your expectations? Please choose one option and provide brief comments if you wish.

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>2016—Global Startup Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Far exceeded my expectations</td>
<td>11.8%</td>
</tr>
<tr>
<td>Exceeded my expectations</td>
<td>54.9%</td>
</tr>
<tr>
<td>Met my expectations</td>
<td>31.4%</td>
</tr>
<tr>
<td>Did not meet my expectations</td>
<td>2.0%</td>
</tr>
<tr>
<td>No value add</td>
<td>0.0%</td>
</tr>
</tbody>
</table>

Based on prior IC² Institute workshops, the benchmarks for this expectations question are: “Far Exceeded” and “Exceeded” (36%--combined) and “Met expectations” (53%) for a total of (89%). The GSP actual percentages were 67% and 31%, for a total of 98%, thereby surpassing the benchmarks. (See addendum for more on benchmarks.)

**TABLE V.**
Question: Would you recommend a future UTEN GSP workshop to other entrepreneurs, researchers, or innovators?

<table>
<thead>
<tr>
<th>Answer Options</th>
<th>Response Count</th>
<th>2016—Global Startup Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, definitely</td>
<td>40</td>
<td>83%</td>
</tr>
<tr>
<td>Yes, likely</td>
<td>8</td>
<td>17%</td>
</tr>
<tr>
<td>No, unlikely</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>No, definitely not</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>0</td>
<td>0%</td>
</tr>
</tbody>
</table>

1 Each participant received an email invitation with a link to an online survey. If an individual indicated his/her company was interested in participating in GSP, the individual answered 12 questions. If an individual indicated his/her company would not be moving forward, the individual answered 10 questions. Non-respondents were contacted a maximum of three times. The first email was sent on September 28, and the survey was closed on October 20.

2 Comparisons of these data with other training are available for Tables IV and V in the addendum, Supplemental Information on Benchmarks.
Ratings for the individual agenda items of the workshops are shown below. Participants were asked to rate each of the agenda items and aspects of the workshop by choosing one of the following options: Extremely Useful, Very Useful, Useful, Not Very Useful, Not at All Useful, or Not Applicable. A sliding scale of weights is used, with 4 for Extremely Useful, 3 for Very Useful, 2 for Useful, 1 for Not Very Useful, and 0 for Not at All Useful. Not Applicable responses are removed before performing calculations.

The benchmark for agenda item scores is 3.00, with anything below that indicating only moderate satisfaction and anything above 3.50 indicating unusually high satisfaction. As shown below, all program components except the last item, surpassed the benchmark\(^1\). One item, “Selling your product/service,” was rated very highly.

<table>
<thead>
<tr>
<th>Agenda Items:</th>
<th>Composite Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Storyboard (telling your story)</td>
<td>3.38</td>
</tr>
<tr>
<td>Selling your product/service</td>
<td>3.55</td>
</tr>
<tr>
<td>Setting up a company in the US</td>
<td>3.10</td>
</tr>
<tr>
<td>Raising capital in the US</td>
<td>3.06</td>
</tr>
<tr>
<td>Informal meeting/visiting with UT-Austin staff</td>
<td>3.25</td>
</tr>
<tr>
<td>Informal meeting/visiting with other companies</td>
<td>2.43</td>
</tr>
</tbody>
</table>

Qualitative Responses

Participants had an opportunity to provide personal comments to four questions. The first question asked why they had rated the workshops relative to their expectations prior to the workshop.

Question: Overall, how well did the GSP Workshop meet your expectations? Please choose one option and provide brief comments if you wish.

Verbatim responses to the question are shown below in italics.

- **Negative Comments**
  
  *I expected the workshop to be more practical and took materials (flipchart paper, markers, etc.) to the session. I understand that there wasn’t enough time for everyone but that should have been thought of in advance and we should have been informed.*

- **Mixed Comments**
  
  *It was a very good workshop/presentation day with a lot of communication and interaction between teachers (amazing) and pupils. Even so, in a video clip, I think that you can present us more real illustrations and selling behaviors in the US Market. Probably you will present that in future sessions.*

  *The contents was good and important. We were expecting a more practical workshop but understood the amount of topics and time limitation for one day make is difficult.*

  *The team was great. The content was great. The venue was great. The only thing we would point out, is that we felt we would immensely benefit from a bit of one-to-one time to share our weaknesses in more detail. Even if very little. Nevertheless, I believe this happened due to the GSP team accepting to take a larger than usual number of companies. Understandably, there couldn’t possibly be enough time for a closer contact. Nevertheless, due to GSP’s team kindness, we feel the door is open to further contact.*

- **Positive Comments**
  
  *I’ve been to a few incubator and accelerator workshops and I didn’t expect much, but this time not only you provided some actionable advice, you also made a compelling case about UTEN.*

  *Well organised and motivational speech, goals orientation.*

  *Sincerely, we learned a lot and we are trying to apply this knowledge in our daily basis.*

  *The aproach to the US market was clear layout trough the workshop. The speakers share their experiences and knowledge while being committed to help us.*

  *All the points were important to think what were we doing wrong.*

  *Very practical and focused on what is really important.*

  *USA market point of view, with a pretty clear vision on what to focus on, not only for USA, but for overall markets.*

  *We got to learn from different aspects of the company, consolidating knowledge that we had plus a new perspective.*

  *The message was clear for us, and gave us all the information we needed to think better about the internationalization process for US.*

  *We were able to truly understand our own concept of “affordable luxury” by discovering for the first time how much could our clients actually save by using our products (more than 80%/year!)*

  *Learning another way to adress the same projet and problems issues, in particular the sales approach in US Market,*

---

\(^{1}\) Informal meeting/visiting with other companies was not part of the program agenda, and the lower score was anticipated.
I knew already the program, as this was our second time, this means my expectations were scoped with knowledge from last year.

We participated in the last year event. I thought we knew, more or less, what was going to happen. In reality it exceeded our expectations.

It was a really hands-on workshop, that exceeded our initial expectations.

Gave some new perspective/way of thinking and good tools.

We see that being partners of UTEN can boost our growth.

I like the way the GPS team interacts and provides a very faithful and realistic account about how things work in US. I also like the fact that they are proactive and really put effort in providing useful input that makes sense to the context of each company.

A second question asked participants to identify the most important single benefit from the workshop.

Question: What was the most important single benefit you obtained from the GSP Workshop?

All but a handful of respondents cited a benefit, with establishing partner frameworks, understanding the US market, and sales and marketing being mentioned frequently. Participants’ verbatim responses were:

I’d have to say that Bruce’s insights on partnerships were the most enriching part.

An expert assessment of [company name] strategy.

A practical insight on how to enter the USA market and its differences compared with the Portuguese market.

Business model discussion

Insight in marketing and strategy

A confirmation that all of what we had decided to be our journey was in the right track

All the advises from the UT staff, of how we shall build our value proposition.

The importance of knowing how to sell. Until now, our selling activities were supported only on our scientific knowledge.

Para além dos conhecimentos transversais a todos os mercados, foi muito importante conhecer a realidade dos negócios dos USA.

It gave me a more a real view of the challenges to enter in the US.

Knowledge about the US market, sales and planning.

Partnership framework presented by Bruce

Learn about how it works doing business in Texas.

The most important benefit was spending a day with people that have experience doing business in the U.S.A.

The culture in the US. If you do not know the culture of the country you want to sell your product, you do not know an important information about your clients.

Concepts of Storyboarding

1) It served as a kind of self-assessment validation to our readiness to approach the US market and 2) we came back with the feeling that we can count on a few very knowledgeable, professional and friendly faces to help us out in that process.

Everything

How should we act when entering the US market, from meetings to business development and all its details.

It allowed me to focus on the key point of how the business should be managed strategically, with a broad view of the market, competitors and the company, with the tactical and operational pursuing its activities competently. Apart from that, we need to constantly exchange information with internal and external customers.

“Show me the money”

Dealing with customers

Mindset

Focus and objectivity

I learned a lot.

The emphasis our presentations to clients should address...

Which is very important as far as I am an university teacher...

The perspectives about US Market, which we think we will have a great opportunity, if we take the next steps right.

A better and clear understanding of how to sell my products/services.

We achieve a more deep knowledge about our own concept.

4 Note that specific company names were redacted from the comments.
and how actually present it in a way that really matters to them (SHOW ME THE MONEY). Also, having a room full of people that are not exactly our most usual clients (yes, men!) actually made us rethink all the pitch and reinvent the way we present [company name].

A clear general overview of what does it take to go to US (for traction and funding)

How to make business in USA. The typical sales live cycle and how to “hack” a customer.

Methodology! To better focus on some critical points like data presentation, problem amplification, etc.

The selling part, we need to develop it...

Get an overview of US market, as well as, be prepared to sell

The reality check about the costs (and not only the financial ones) of going global.

How far I need to change my pitch to ensure Americans hear it and act on it.

Clear view of US market.

The “How the money flows” “map”.

The most important benefit is about how we communicate our product and what we want. We felt the urgent need to review how we communicate and pitch in a much more direct way.

Specific market approach and focus. Don’t loose and make others loose time.

US market reality and sales strategy
Learning about how Sales and Marketing adapted to the US market are key. Learning that we need to build our marketing plan with local partners.

The logistics of the UTEN program.

Learning about the business landscape in Austin

Discovering the real VALUE for my clients - how much do they save by choosing [company name]. Networking & listening to important USA rules and entry requirements.

A third question solicited ideas and suggestions for possible changes in future GSP workshops. Eighteen of the respondents said “none.” There were several themes that emerged from those who made suggestions: expand the length of the workshop, provide more outcome data on prior and current GSP companies, allocate more time for companies to present information, and devote more time for personal consultations.

Question: What refinements or improvements do you suggest for future GSP workshops? Please describe specific changes briefly. If you do not believe any changes are necessary, please specify “none.”

The verbatim comments are shown below.

The workshop is well suited for Portuguese reality.

Success on insuccess histories of companies that were in the UTEN programme would be nice. See the barriers they found and the way they work around them

More examples of what other companies have done there.

To use a camera during the workshop, so that we can review our performance while presenting our ideas and offer.

The time was extremely short for the tasks that got asked to do and that gave very short time for feedback or even for all companies to show they answers

Taking into consideration the number of participant companies, in my opinion the workshop duration shall be increased from 1 day to 2 days.

A two day workshop would be more useful. It would give companies the opportunity to adjust their presentations based on the information they received during the workshop

The workshop should be more “hand on” and less like a lecture. Go through the learn lessons of Portuguese companies that have succeed and failed while going to U.S.A.

I would like to have a more hands on the Storyboard, but the group was very big, so it was not possible.

As previously mentioned, it would be great if a little bit more of time could be dedicated to each of the companies. On the other hand maybe that would mean we could end up not being invited due to time... so, maybe it’s just fine as it is.

Tell our story

One on one talks with the different companies would be a plus.

A topic that could be added in an upcoming issue could be the “Costumer Relationship Management (CRM)”.

I just think that setting up a short period for a more close conversation with one of the members of UT-Austin staff would be beneficial. It would be a period for direct discussion about our own aims, difficulties, opportunities, etc... Each member of the staff could approach each table and discuss with each company those issues...

It will be great to learn more about successful companies which have integrated the program
To see what every team actually built in each step of the workshop would be one of the points to have in consideration.

2 days workshop, will be better.

More video shows. Real selling in action. For me, this are the most important thing that can really improve your workshop.

Stating more clearly the objectives of the sessions and the exact materials to bring.

It would be useful if the GSP Team could provide in advance information about the other companies at the workshop.

Nothing really. (I thought: It would be nice to let all startups to work out its own storyboard step-by-step, then review & discuss - but it is not realistic within 1 day.)

I believe it would be very useful to have more examples and successful cases but in an overall approach I believe the workshop is well structured and the assignments were very useful.

The workshop should be longer than 1 day, although probably not running days because the participants might accumulate too much work at the office.

Explain sucess cases in your history so far.

Describe real past experiences of portuguese startups (both good and bad experiences)

Participants were given a final opportunity to communicate about anything in the last question. Only 8 responses were received.

Question: Please provide any other comments or questions you may have thought about since the workshop was completed.

We are going to Austin on November. Is it possible to go three of us?

Just to highlight how important it was for us to be given the opportunity to establish a closer relation with Rod, Bruce, Chris and Marco. Not only it was really great to meet them personally, but it also gave us a big boost in confidence. Thank you.

When will we know the results for the next phase?

Spend more time in preparing a storyboard (extensiv practice) and make a “Sales Theater” with a potencial customer.

Establish my company in the US in not wishful thinking. We must be there, asap. Now we are working on that even more strongly since my company [company name] was chosen to represent my Portugal on the first Web Summit in portuguese soil. Its an honour, an a big opportunity to give more strenght and energy to our project.

Once more: thanks a lot for the useful day! Please share the slides as was promised. ...And of course we are desperately waiting for your feedback with your opinion about our fit into the program. (company name team)

We would like to know what the UTEN team thought of the startups and their teams

It was not very clear the GOAL of this workshop... What was its main purpose? And it is not yet clear the whole process of UTEN program...

Supplemental Information on Benchmarks—Global Startup Program

There are at least two benchmarks or comparison points for questions on GSP with those on prior training surveys. The following question about “expectations” has appeared on more than 100 training surveys. Based on prior IC² Institute workshops, the benchmarks for this expectations question are: “Far Exceeded” and “Exceeded” (36%--combined) and “Met expectations” (53%) for a total of (89%).

<table>
<thead>
<tr>
<th>Question: Overall, how well did the GSP Workshop meet your expectations? Please choose one option and provide brief comments if you wish.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Answer Options</strong></td>
</tr>
<tr>
<td>Far exceeded my expectations</td>
</tr>
<tr>
<td>Exceeded my expectations</td>
</tr>
<tr>
<td>Met my expectations</td>
</tr>
<tr>
<td>Did not meet my expectations</td>
</tr>
<tr>
<td>No value add</td>
</tr>
</tbody>
</table>

Actual percentages for the GSP workshops are shown in the first column. The GSP percentages are 67% (11.8 + 54.9 = 66.7) and 31% for a total of 98%. Thus the GSP training easily surpassed the benchmarks for this question.

A second comparison can be made with one other survey question, although that question has appeared on a limited number of instruments.

Would you recommend this training to friends, colleagues, acquaintances/other entrepreneurs, researchers, or innovators?

The answer options were:

» Yes, definitely
» Yes, likely
» No, unlikely
» No, definitely not
» Don’t know
Coordination: Marco Bravo and Robert A. Peterson, The University of Texas at Austin
Editors: Marco Bravo, Robert A. Peterson and Prentiss Riddle, The University of Texas at Austin
Design & production: Francisca Aroso Pinto de Oliveira, The University of Texas at Austin
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2016: ACTIVITIES REPORT

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University Technology Enterprise Network

Commercialization outlet for Portuguese Science and Technology

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