

**Read the questions carefully and justify all your answer.  
You cannot use any class or personal materials.  
Respond to group 1 and group 2 in two separate sheets**

### **Unbabel - the Portuguese AI+translation startup**

Unbabel, the Portuguese startup that combines crowdsourced human translation and automated translation using AI to deliver fast translation with human tone and nuance, is announcing a new subscription model for its service, offering companies the option to lower costs when going global and growing into new markets. Unbabel's service works by taking customer text and translating it using a mix of artificial intelligence and human translators. Once an initial pre-translation is done, human editors receive the translation and edit for inconsistencies. The combination of artificial and human intelligence delivers faster translations, with human quality. Businesses are able to utilize this service by requesting translations via Unbabel's web order form, email, API, or by integrating it into their daily workflow with Unbabel for Zendesk and for Mailchimp.

Unbabel enables modern enterprises to serve customers in their native languages, with always-on, scalable translation across digital channels. Powered by AI and refined by a global community of translators. The startup has a network of 100k registered translators working as freelancers. On the road to internationalization, companies have to overcome several obstacles. Language can be one of them. In a world where technology is increasingly gaining ground, the Portuguese startup has created a technology solution that "marries" artificial intelligence with human post-editing to machine translation. The company started in 2013 and was able to raise \$23 million B-series funding round in January 2018, believing they are "still in the beginning".

Vasco Pedro, the co-founder and CEO explains that "We help companies communicate with customers on the go. This platform, which combines machine translation with human translation, is the way we do it. But our goal is to enable companies to play in the global marketplace in a transparent, easy, scalable way". With this solution, an English-speaking person can respond - for example in the case of a customer service - in 28 different languages. Thus, the question of language, sometimes regarded as a variable, can be eliminated. Human resources can be concentrated in the same place, which can lead to greater optimization and flexibility.

Unbabel believes that current translation solutions "are a bit of a past century," since they rely primarily on sending a text to a company to be translated which, once translated, is resubmitted. "It's mainly based on human endeavor: professional translators. What we are advocating is that this makes no sense, is not scalable and does not allow companies the flexibility and speed to tackle the challenges they have in multilingual communication. It takes a new category of products that we are calling Translation as a Service [TaaS]." Vasco Pedro argues that there will be a change of mindset: Companies will no longer have human resources available within companies for certain projects, for "a state where translation is embedded directly in the tools companies use". "We believe it has to be technologic driven and that is Translation as a Service. A translation that's always available, fast, scalable." With a subscription-based business model, Unbabel's solution can be used by global companies, including SMEs with the ambition to scale. Microsoft, Booking.com, Facebook, Pinterest, Rovio, Skyscanner are some of the firms, among more than 150, that use this service, mainly in the travel, high tech, gaming and e-commerce sectors.

The new service offers a convenient solution for companies who have a large volume of translations needed on a day-to-day or month-to-month basis. This guarantees the same high-quality results for a pre-set rate, enabling companies that require ongoing translation services to plan ahead, regardless

of the word count. The subscription-based translation service is calibrated according to companies needs and prices are based on content type and volume. The service promotes cost savings of up to 76% vs other translation methods and increased customer satisfaction. Speaking to the company's growth and the need for such technology, Vasco Pedro, co-founder and CEO of Unbabel said, "We are now translating over 1,000,000 customer service messages a month. That's over five times the volume we saw in 2018, which underscores the global demand for agile multilingual customer service. Now, we have the opportunity to develop the next generation of the 'Translation-as-a-Service' (TaaS) platform that will power enterprise communications of the future and ultimately become the world's translation layer."

Recently, in September 2019, Unbabel got another \$60 million in the latest investment round aimed at exploring new markets and product development. The announcement comes in the wake of the company's strongest quarter yet, both in terms of revenue growth and breakthroughs in machine translation technology. Unbabel has now distanced rival language industry startups such as Lilt, Smartcat, or, more recently, lengoo, by a considerable margin in terms of amount raised. As such, with this latest funding round, Unbabel has arguably become the most prominent example in the language industry of what, Redpoint Managing Director, has called the "AI Agency" — a new kind of company that is using the latest advances in machine learning "to disrupt a market dominated by agencies."

For Vasco Pedro there's no doubt that the key to the success of the startup is the team. "If there is one thing I am proud of, it is the people we attract from the founding team - and our ability to overcome all difficulties - to the people [who we can] attract, with the right culture, with the right experience, that believe what we are doing." How do you find the right people? "It takes a little luck, as in everything in life." But being able to team up with the right people means creating the right message, having "a vision that is big enough, challenging enough, to demonstrate that what we're doing is rightful, it's real, and that we're doing something that has a big impact, and that can have a big impact." Unbabel has around 200 full time employees. Inventing the future and experimentation is part of team's principles. The teams have principles representing their values, values that would drive them through many hiring, integration, brainstorming sessions, and design sprints. Some ideas will surely fail. And certainly, some have already failed. But that doesn't worry the startup much. "One of the things we talk about at Labs is that 50% of ideas must fail. If they don't fail, we are not taking enough risks."

## Group 1

### a) Make an analysis of resources, capabilities and core competences of Unbabel (7)

| Theory  | Practical application  |
|---|--|
| <p>Explain what are resources (and what kind), capabilities and core competences</p> <p>Explain the role of an analysis of resources and capabilities can have in strategy development. (20%)</p> | <p>Unbabel resources:</p> <p>Tangible resources: (20%)</p> <ul style="list-style-type: none"> <li>- Financial resources – high capacity to raise funds: \$23 million plus \$60 million in September 2019, although nothing is said about profitability, which may still be negative</li> <li>- Organizational resources – Human resources are concentrated in the same place, which can lead to greater optimization and flexibility. At the same time, they have a network</li> </ul> |

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|--|---|
|  | <p>organization with a core team of employees and a network of translators.</p> <ul style="list-style-type: none"> <li>- Physical resources – not much information</li> <li>- Technological resources – a technology solution that “marries” artificial intelligence with human post-editing to machine translation. A platform that combines machine translation with human translation, and where an English-speaking person can respond - for example in the case of a customer service - in 28 different languages through a web order form, email, API, or by integrating it into their daily workflow with Unbabel for Zendesk and for Mailchimp</li> </ul> <p>Intangible resources (20%)</p> <p>Human resources – in-house development team, plus network of 100k registered translators working as freelancers</p> <p>Internal team of 200 full time employees, with the right culture, with the right experience, that believe what we are doing.</p> <p>Innovation and knowledge resources – The algorithms and knowledge base of the company.</p> <p>Reputation – not much is said, but students may (optionally) say that the customer base with clients such as Microsoft, Booking, Facebook shows by itself that the company has good reputation among key customers.</p> <p>Capabilities of Unbabel: (20%)</p> <p>Capacity to make translations using AI</p> <p>Capacity to make translations using humans</p> <p>Capacity to iteratively create feedback loops between automatic and human translation to improve the system.</p> <p>Capacity to offer the solution through a SaS platform that is efficient and offers a good customer experience</p> <p>Core competences: (20%)</p> |
|--|---|

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|--|--|
|  | <p>Unique combination of artificial and human intelligence, which delivers faster translations, with human quality</p> <p>Ability to constantly learn, improve and innovate the translation model through feedback loops and innovation processes: 'One of the things we talk about at Labs is that 50% of ideas must fail. If they don't fail, we are not taking enough risks</p> |
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- b) Given the information provided, can you consider that Unbabel has now a competitive advantage over its rivals? (5)

| Theory (40%)   | Application to the case (60%)  |
|--|--|
| <p>Explain that a company has a competitive advantage in a market when it offers a unique value solution for its customers, difficult to imitate by competitors, allowing the company to achieve above-average profits in a sustainable way.</p> <p>The explanation can also resort to the criteria for being a competitive advantage:</p> <p>Valuable for the customers and rare (unique)</p> <p>Hard/costly to imitate (sustainability of the competitive advantage)</p> <p>Allows above average returns</p> <p>The competitive advantage results from a strategy that seeks a dynamic fit between the company's core competences and market conditions. However, describing Porter /business strategies is not the same as explaining different strategies is not explaining what competitive advantage is.</p> <p>It is accepted however, if the response relates competitive advantage with core competences, and then characterizes the core competences in terms of value added and uniqueness, hard to imitate, and the basis for above average returns.</p> | <p>Unbabel has a competitive advantage because:</p> <ul style="list-style-type: none"> <li>- Offers a unique solution that is highly valued by customers:</li> </ul> <p>Unbabel enables modern enterprises to serve customers in their native languages, with always-on, scalable translation across digital channels, offering automatic, lower cost, faster translation with human quality.</p> <p>A translation that's always available, fast, scalable</p> <p>A personalized, flexible and cost saving solution to customers with a high volume of translations.</p> <p><i>"The new service offers a convenient solution for companies who have a large volume of translations needed on a day-to-day or month-to-month basis. This guarantees the same high-quality results for a pre-set rate, enabling companies that require ongoing translation services to plan ahead, regardless of the word count. The subscription-based translation service is calibrated according to companies needs and prices are based on content type and volume. The service promotes cost savings of up to 76% vs other translation methods and increased customer satisfaction"</i></p> <ul style="list-style-type: none"> <li>- This is hard to imitate by competitors –</li> </ul> <p>Microsoft, Booking.com, Facebook, Pinterest, Rovio, Skyscanner are some of the firms, among more than 150, that use this service, which provides some evidence that Unbabel is gaining ground to competitors.</p> |

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|  | <p>The text mentions that Unbabel has now distanced rival language industry startups in terms of amount raised.</p> <p>- The growth and capacity to raise funding in the market as a startup are indicators of a 'potential' sustainable competitive advantage although in startups this is harder to say.</p> <p>The customer base has grown over five times the volume we saw in 2018. They are developing the next generation of the 'Translation-as-a-Service' (TaaS) platform that will power enterprise communications of the future and ultimately become the world's translation layer."</p> <p>So, there is a promise of future above average returns, although they may not have achieved that. So, we accept responses that the company has a competitive advantage, or a potential competitive advantage, upon good justification.</p> |
|--|--|

- c) Given the information provided, which organizational structure would you consider Unbabel has? Provide the rationale for your answer. (3)

| Theory  | Practical application   |
|---|---|
| Briefly explain the organizational structures (30%) | (70%) Identification of the network structure of Unbabel, based on the fact that its offering is based on a core team (200 employees), supported by a network of 100k registered translators working as freelancers |

## Group 2

Consider that Unbabel has the following income statement.

| Income Statement                          |          |
|---|----------|
| Sales                                     | 100.000€ |
| Earnings Before Interest and Taxes (EBIT) | 10.000€  |
| Interest                                  | 8.000€   |

|              |        |
|--------------|--------|
| Taxes        | 200€   |
| Net Earnings | 1.800€ |

Also, consider that Unbabel has the following information from the balance sheet:

- Equity = 15.000€
- Debt = 60.000€
- Unbabel's liabilities consists of only its debt.

Finally, consider the following ratios:

| Ratio                       | Ratio Formula                                |
|-----------------------------|--|
| <b>Profitability</b>        |  |
| Operational Return on Sales | (EBIT / Sales) x 100                         |
| <b>Efficiency</b>           |  |
| Asset Turnover              | Sales / Total Assets                         |
| <b>Liquidity</b>            |  |
| Current Ratio               | Current Assets / Current Liabilities         |
| Cash Ratio                  | (Cash + Bank Deposits) / Current Liabilities |
| <b>Financial Stability</b>  |  |
| Debt to Equity              | Total Liabilities / Total Equity             |
| Debt to Assets              | Total Liabilities / Total Assets             |
| Interest Coverage           | EBIT/Interest                                |

**Based on the above information, perform a financial analysis of Unbabel. Include in your analysis the adequate financial ratios (5).**

Correction topics:

1. Calculating the ratios (15% ratios +15% calculating the assets through the accounting fundamental equation)
  - Operational Return on Sales =  $10000 / 100000 = 10\%$
  - Asset Turnover = 1.33
    - Students must be able to calculate the assets from the information given in the balance sheet, Assets=Equity+Liabilities (15%)
  - Not enough information to use the liquidity ratios
  - Debt to Equity =  $60000 / 15000 = 4$
  - Debt to Assets =  $60000 / 75000 = 0.8$

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- Interest Coverage =  $10000/8000 = 1.25$
2. Analysis: 35% recognizing the company is highly leveraged on debt + 15% recognizing that the debt might become unsustainable + 15% define each type of ratio +5% overall coherence, relate the financial analysis to the fact that the Unbabel is a start-up

Example of a possible answer:

The information available shows that Unbabel has borrowed heavily from the bank, with a heavy interest bill that significantly damages its net earnings.

This can be seen in the information coming from the balance sheet, where the amount of debt quadruples the equity (as can also be seen from the debt to equity ratio). This situation impacts the profitability ratios (ability of the company sales, assets and equity to generate earnings) as shown by the difference of the relatively healthy operational return on sales (10%), and the difference between the EBIT and net earnings.

Without industry information to compare with the asset turnover is harder to interpret, but nevertheless it seems healthy.

Finally, the financial stability ratios (that show the ability of the company to respond to its long-term liabilities) can raise some concern, specially the interest coverage that is very low, meaning that the sustainability of the debt might be endangered.

Overall, Unbabel seems to have grown by borrowing a significant debt. This debt is impacting its profitability and financial stability and Unbabel can face serious problems if it faces lower sales.