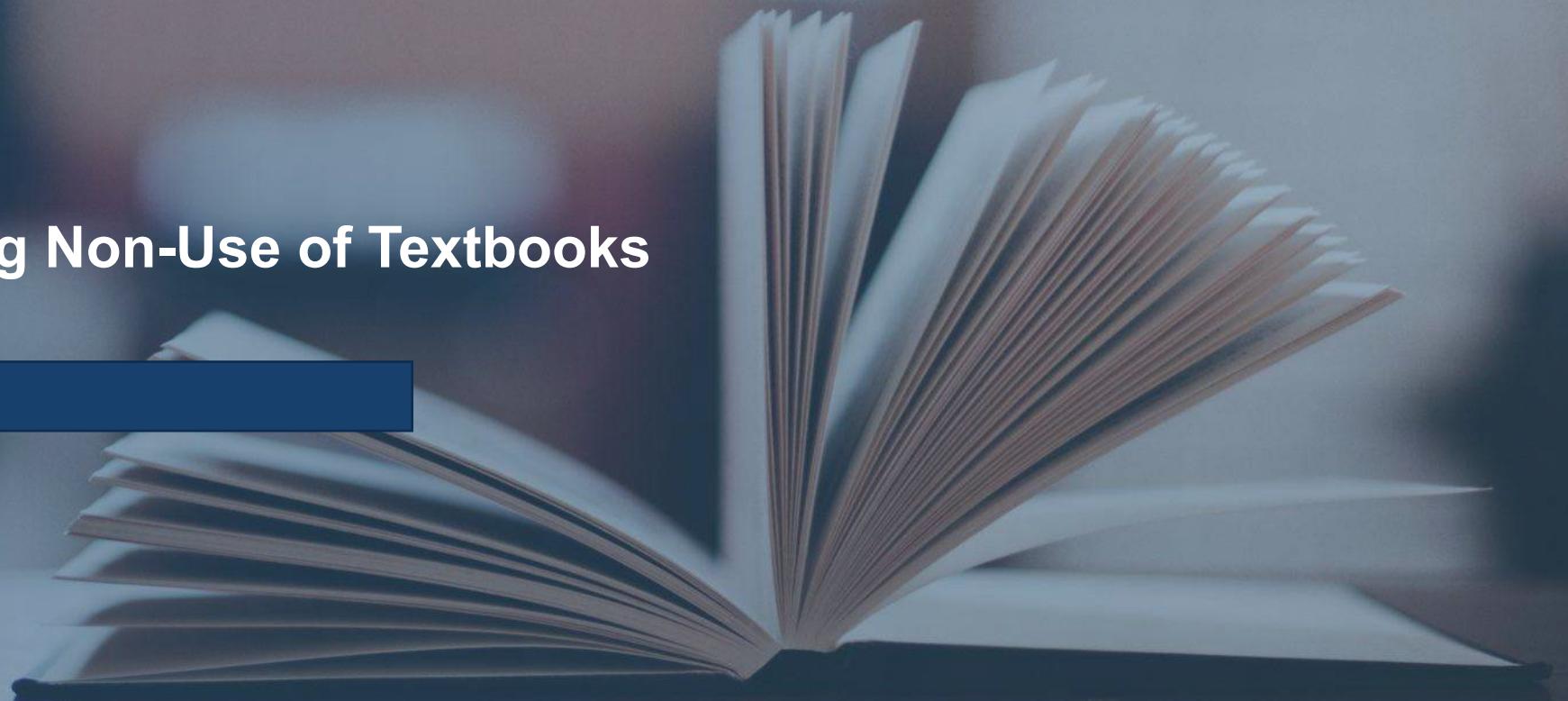
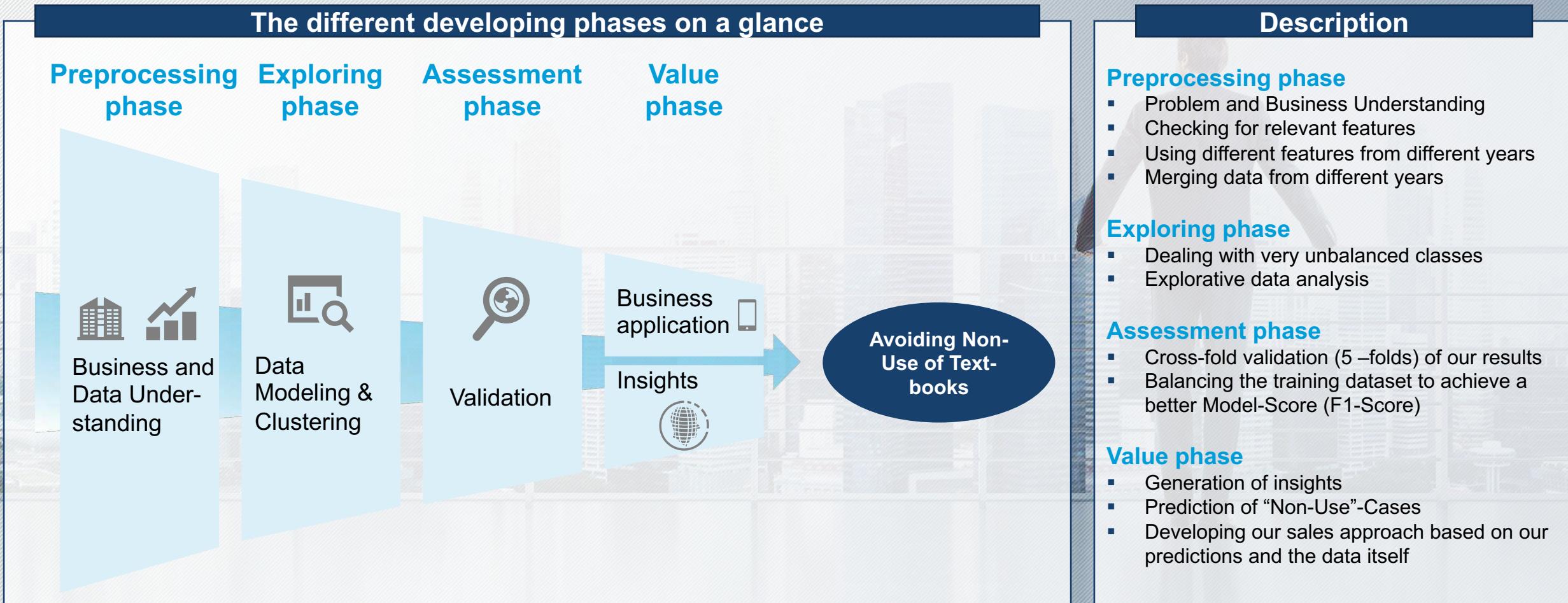


Grupo X – Avoiding Non-Use of Textbooks

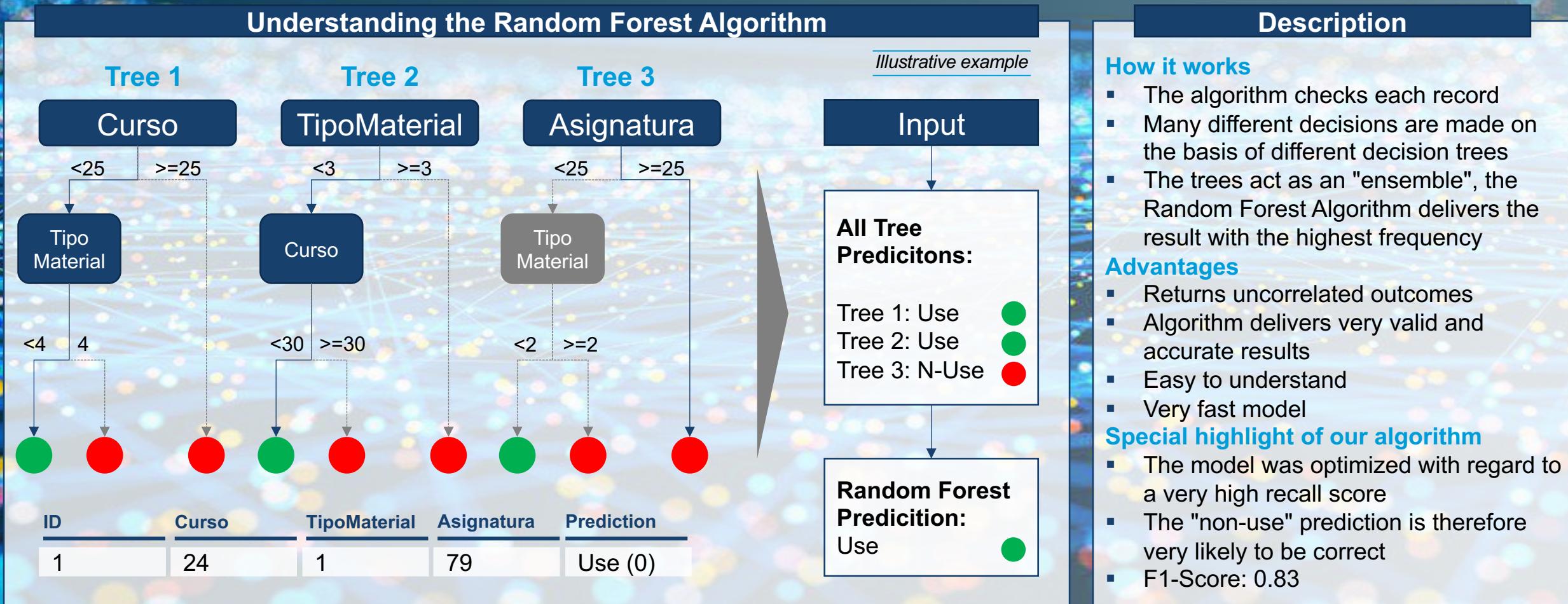
Group Datathon



Our approach to generate value with analytics for Grupo X



Our Random-Forest prediction model build the fundamant for our business strategy



The deep analysis of the previous data help to understand the environment

Non-use subjects

Ca. 70% of all „non-use-cases“ are related to only 10 subjects
(Read: 10% of all "non-use cases" are related to "Musica")



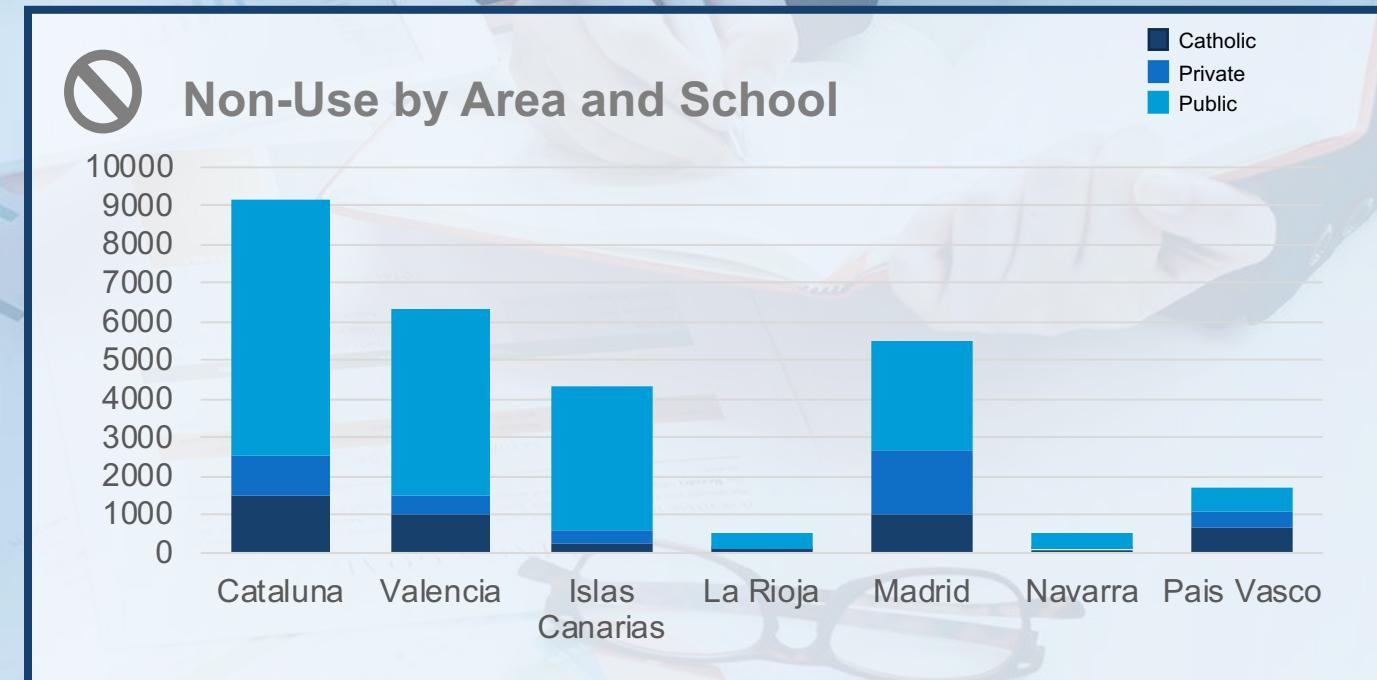
Non-use by curso



 **7076 analyzed clients**



975.76 €
av. value
(per class)



Our market research shows that Grupo SM are in a dynamic and competitive environment

Industry trends and influences

 High spending in private education

 Majority of children in Spain attend state schools

 Autonomous regions control their own education systems

 Slow trend towards digitalization in education

Market development

- The recent years show a strong growth in the production of educational books
- Group “infantil” and “secondary education” showed the highest growth rates in the previous years
- Grupo X’s main competitors are: Editorial Planeta, Penguin Random House, Editorial Santillana

Publishing Production(Spain) - Titels by subject

	2014	2015	2016	2017	% Variación 2017/2016
TOTAL	78.508	80.181	81.496	87.262	7,1
Texto no universitario	17.203	18.109	18.145	19.108	5,3
Educación infantil	3.094	2.743	2.703	2.921	8,1
Educación primaria	6.618	7.237	7.033	7.016	-0,2
E.S.O.	3.587	4.581	4.805	5.104	6,2
Bachillerato	639	789	893	941	5,4
F.P.	318	251	256	248	-3,3
Libros y materiales complementarios	2.947	2.509	2.455	2.878	17,2

Fuente: Comercio Interior del Libro en España 2017

Potential challenges

-  Digital books are cheaper
-  Competition against cheap online offerings

 Long customer relationships

 “Fear” of digital theft

 High costs for schools to switch to digital platforms

Success factors

The extraordinarily high accuracy of our algorithm builds the basis for a targeted customer scoring approach to detect the most important clients

Focus group	Client value	Loss exposure	Age group	School type
<p>What we do:</p> <ul style="list-style-type: none">▪ Focus on "non-use" customers▪ Target on school level <p>How we score:</p> <ul style="list-style-type: none">▪ - <p>Why we do it:</p> <ul style="list-style-type: none">▪ The high accuracy of our algorithm shows us which business would most likely be lost if we do not take action	<p>What we do:</p> <ul style="list-style-type: none">▪ Focus on customers with high „ValorClase“ <p>How we score:</p> <ul style="list-style-type: none">▪ Range from 1 to 4 based on the quantile▪ The higher the more important <p>Why we do it:</p> <ul style="list-style-type: none">▪ Focus on the most important customers in terms of financial value	<p>What we do:</p> <ul style="list-style-type: none">▪ Focus on customers where we expect a high loss due to „non-use“ <p>How we score:</p> <ul style="list-style-type: none">▪ Range from 1 to 4▪ GrupoEdit=1 x ValorClasse <p>Why we do it:</p> <ul style="list-style-type: none">▪ Avoid loss▪ Easier to convince existing cusotmers	<p>What we do:</p> <ul style="list-style-type: none">▪ Focus on young ages <p>How we score:</p> <ul style="list-style-type: none">▪ 1-3 depending on ratio of classes which are taught to younger age groups <p>Why we do it:</p> <ul style="list-style-type: none">▪ To achieve strategic influence▪ Children should associate our brand with school materials	<p>What we do:</p> <ul style="list-style-type: none">▪ Focus on private schools <p>How we score:</p> <ul style="list-style-type: none">▪ 0 or 3 <p>Why we do it:</p> <ul style="list-style-type: none">▪ Market research indicate that parents tend to spend more money for education material, if children attend a private school

 Result: Client rating based on the total score, which serves as a priority list for our sales team

We plan to be present in every region with a dedicated focus on the most valuable customers

Our sales approach on a glance



Presence
in every
region



Focus on
valuable
customers



Sales goal:
3 Schools
per day



Sales expect.:
75% success
rate

Area	Clients	Avg. Client_Value (summed ratio)	2	3	4	5	6	7	8	9	10	11
Cataluna	677	990.08	3	34	95	259	147	57	56	17	7	1
Valencia	487	1203.13	0	1	26	119	136	103	81	14	4	3
Islas Canarias	193	993.22	0	14	34	34	51	32	22	4	2	0
La Rioja	12	1047.20	0	0	2	2	5	1	1	1	0	0
Madrid	708	1227.99	0	3	40	140	234	94	123	50	15	9
Navarra	14	1093.50	0	0	4	1	2	1	5	1	0	0
Pais Vasco	41	1263.42	0	0	5	5	9	10	10	1	0	1

3 Sales takeaways

1. Focus on all regions, for strategic market penetration
2. Main focus on Cataluna, Valencia, Islas Canarias and Madrid
3. A low number of sales people should also focus the small regions, due to their high importance

Additional strategic guidelines and recommendations



Future investments in digital services to meet the challenges of the 21st century



Offering of E-textbooks and possible ‘Book-subscription’ models to generate further cash flows and reduce cost basis



Trend towards second hand: The establishment of a book second hand market (operated by Grupo SM) can generate further cash flows



„Mass-customizing-approach”: Offering of further (paid) material (i.e. scanning a QR-Code in a book lead to additional exercises or videos)