



**Universidad
Zaragoza**

Undergraduate Dissertation

INVESTMENT PROJECTS AND FINANCIAL VIABILITY:

TECNOLIS

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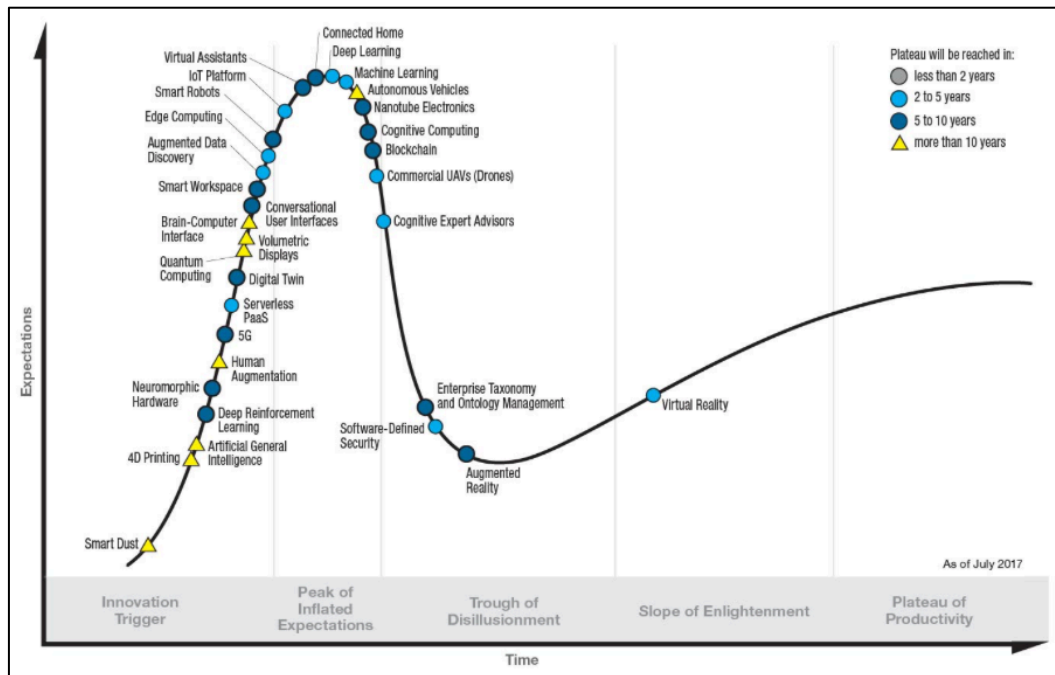
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9. ANNEX

Annex 1. Figure 2 : Gartner Hype Cycle for emerging technologies. (Gartner, 2017)



Source: <http://www.gartner.com>

Annex 2. Figures 6 and 7. Ikea Home Planner simulator.



Source: <http://starworldpacknmove.com>

Annex 3. Figure 8 : IKEA Place



Source: www.engadget.com

Annex 4. Figure 9. List of Spanish Augmented Reality companies.

AUGMENTED REALITY COMPANIES IN SPAIN
1. Ababan Interiores Sl
2. Ac Marketing Infografia Y Realidad Virtual S.l.
3. Afinidad Realidad Comunicacion S.l.
4. Aplicaciones Para Realidad Virtual Sl.
5. Chamizo Arquitectos Sl
6. Chamizo Diez Luis Domingo
7. Ciudad Aumentada Sl.
8. Clickar App Realidad Aumentada Sl.
9. Compartiendo Realidades Sociedad De Responsabilidad Limitada.
10. Confialia Realidad Informatica Sl.
11. Consultoria Informatica Nicer Sl (En Liquidacion)
12. Corporacion Empresarial De Realidades Imaxinadas Mosquito Sl.
13. Creando Realidades Sl
14. Crear Dar Realidad S.l.
15. Diversiones En Realidad Virtual Sl.
16. Dos Y Cuatro Realidad Sl
17. Elber Realidades Y Proyectos Sl.
18. <u>Elite Madrid 2014 Sl.</u>



19. Enoe Realidad Virtual Sl
20. Equent media group S.L.
21. Fringes C. T Sl.
22. Geseco Residuos S.l.
23. Graveras Del Levante Sociedad Limitada.
24. Green&Current Servicios De Restauracion Sl.
25. Grupo Svd Obra Decoracion Y Realidad Virtual Sl.
26. Hacemos Realidad Tu Proyecto Sl.
27. Imagen En Realidad Aumentada Sl.
28. Imaginacion & Realidad S.l.
29. Infocad Infografia S.l.
30. Inge Video Sa
31. Innovacion En Realidad Virtual Sl (En Liquidacion)
32. Interamedia Events Sl
33. Interfaces Hombre Maquina Avanzados Sl
34. Internacional Artis Sa
35. Inversiones Ciudad Aumentada Alcorcon Y Mas Sl.
36. Itop Management Consulting Sl
37. Jablan Realidades Audiovisuales S.l.
38. Klon Realidad Virtual Sl.
39. La Realidad De La Tia Perrina Sl.
40. Medical Simulator Sl
41. Metamedia Sl
42. Monsuton S.L.
43. Nextel Engineering Systems Sl (En Liquidacion)
44. Nuevo Sentido Tecnologico Realidad Aumentada Sociedad Limitada.
45. Origina Ideas Que Se Hacen Realidad Sl.
46. Otsaila Trade Sl
47. Paradigma studio S.L.
48. Promociones Y Congresos Sdad Coop Andaluza
49. Proyectos Y Realidades De Ingenieria Y Arquitectura Slp



50. Proyectos Y Realidades En Promociones SIne
51. Psicologia Y Realidad Virtual Sl
52. Publicube Sl
53. Realidad 2000 Sl
54. Realidad Cambiante Sl
55. Realidad Empresarial Constructora S.l.
56. Realidad Empresarial Y Desarrollo One S.l.
57. Realidad Inmobiliaria Levantina Sl
58. Realidad Inmutable S.l.
59. Realidad Virtual Activa S.l.
60. Realidad Visual Arquitectonica S.l.
61. Realidades Del Pacifico España Sl.
62. <u>Realidadex 360 Gra2 Sl.</u>
63. Rodriguez Borge Constantino
64. Sion Realidad Aumentada Sl.
65. Spin Media Sl
66. Sueno Hecho Realidad Sl.
67. Taller De Realidades Sl
68. Tx Instalaciones Multimedia S.l.
69. Ute Asoc Realidades Para La Integracion Social
70. Valencia Vision Sl
71. Xyze Studio, Diseño Y Realidad Virtual, Sociedad Limitada.
72. Youniquexperience Sl.

Source: empresite.economista.es, Own elaboration

Annex 5. Figure 12. Value Chain



Source: wikipedia

Annex 6. Figure 15. Axesor Invoice of 9.918 firms.

Presupuesto de base de datos				
Nombre	Nº de Registros	P.V.P.	Precio con descuento	Total
Acción Telemarketing	9.918	0,08 €	0,080 €	793,44 €
Datos adicionales				
Dirección Completa	9.918	0,05 €	0,050 €	495,90 €
URL	919	0,03 €	0,030 €	27,57 €
Total				1.316,91 €
IVA (21%)				276,55 €
TOTAL (IVA incluido)				1.593,46 €

Source: Axesor.com

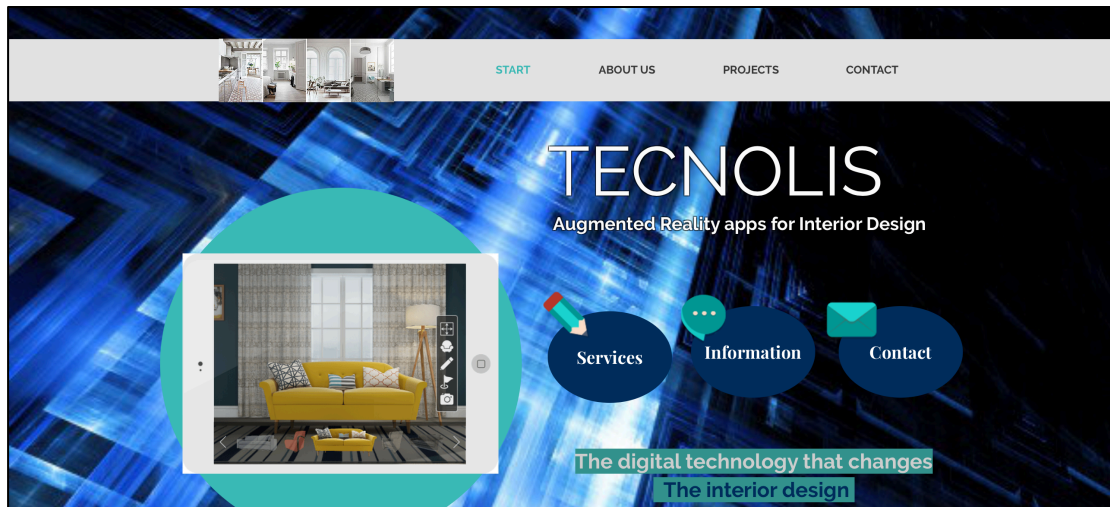
Annex 7. Figure 16. Axesor Invoice of 37.358 firms.

Presupuesto de base de datos				
Nombre	Nº de Registros	P.V.P.	Precio con descuento	Total
Acción Telemarketing	37.358	0,08 €	0,080 €	2.988,64 €
Datos adicionales				
Dirección Completa	37.358	0,05 €	0,050 €	1.867,90 €
URL	3.290	0,03 €	0,030 €	98,70 €
Total				4.955,24 €
IVA (21%)				1.040,60 €
TOTAL (IVA incluido)				5.995,84 €

Source: Axesor.com



Annex 8. Figure 17. Web page of TECNOLIS



Source: Own Elaboration /<https://martamasip1995.wixsite.com/TECNOLIS>

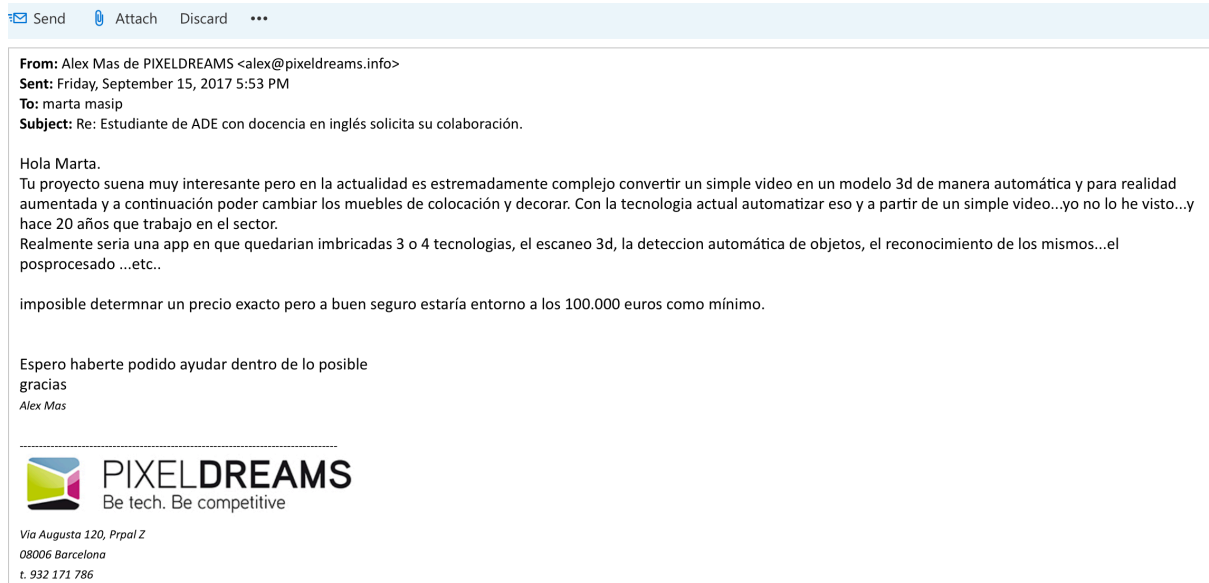
Annex 9. Figure 18. Tecnolis video



Source: Own Elaboration/Youtube.com



Annex 10. Figure 19. Pixel Dreams Cost estimation.



Annex 11. Figure 23. working capital requirements

WORKING CAPITAL REQUIREMENTS	6,195.99
Renting	4,219.08
Marketing	1,316.91
Zoho + Pixel Dreams	660.00

Source: Own Elaboration

Annex 12. Figure 24. Data of the Loan

DATA	
Loan	105,000.00
Nominal interest rate	4.75%
Years of the loan	6
Number of payments by years	12
Future value	0
Ordinary (=0) or annuity due (=1)	0

Source: Own Elaboration

Annex 13. Figure 25. Loan Schedule

LOAN SCHEDULE				
PERIOD (N)	INSTALLMENT (A)	INTERESTS (I)	PRINCIPAL PAYMENT (A)	OUTSTANDING CAPITAL (MS)
1	-1,969.48	-415.63	-1,553.85	-103,446.15
2	-1,969.48	-409.47	-1,560.00	-101,886.15
3	-1,969.48	-403.30	-1,566.18	-100,319.97



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4	-1,969.48	-397.10	-1,572.38	-98,747.60
5	-1,969.48	-390.88	-1,578.60	-97,169.00
6	-1,969.48	-384.63	-1,584.85	-95,584.15
7	-1,969.48	-378.35	-1,591.12	-93,993.03
8	-1,969.48	-372.06	-1,597.42	-92,395.61
9	-1,969.48	-365.73	-1,603.74	-90,791.86
10	-1,969.48	-359.38	-1,610.09	-89,181.77
11	-1,969.48	-353.01	-1,616.46	-87,565.31
12	-1,969.48	-346.61	-1,622.86	-85,942.44
13	-1,969.48	-340.19	-1,629.29	-84,313.16
14	-1,969.48	-333.74	-1,635.74	-82,677.42
15	-1,969.48	-327.26	-1,642.21	-81,035.21
16	-1,969.48	-320.76	-1,648.71	-79,386.50
17	-1,969.48	-314.24	-1,655.24	-77,731.26
18	-1,969.48	-307.69	-1,661.79	-76,069.47
19	-1,969.48	-301.11	-1,668.37	-74,401.10
20	-1,969.48	-294.50	-1,674.97	-72,726.13
21	-1,969.48	-287.87	-1,681.60	-71,044.53
22	-1,969.48	-281.22	-1,688.26	-69,356.27
23	-1,969.48	-274.54	-1,694.94	-67,661.33
24	-1,969.48	-267.83	-1,701.65	-65,959.68
25	-1,969.48	-261.09	-1,708.39	-64,251.30
26	-1,969.48	-254.33	-1,715.15	-62,536.15
27	-1,969.48	-247.54	-1,721.94	-60,814.21
28	-1,969.48	-240.72	-1,728.75	-59,085.46
29	-1,969.48	-233.88	-1,735.60	-57,349.86
30	-1,969.48	-227.01	-1,742.47	-55,607.40
31	-1,969.48	-220.11	-1,749.36	-53,858.03
32	-1,969.48	-213.19	-1,756.29	-52,101.75
33	-1,969.48	-206.24	-1,763.24	-50,338.51
34	-1,969.48	-199.26	-1,770.22	-48,568.29
35	-1,969.48	-192.25	-1,777.23	-46,791.06
36	-1,969.48	-185.21	-1,784.26	-45,006.80
37	-1,969.48	-178.15	-1,791.32	-43,215.48
38	-1,969.48	-171.06	-1,798.41	-41,417.06
39	-1,969.48	-163.94	-1,805.53	-39,611.53
40	-1,969.48	-156.80	-1,812.68	-37,798.85
41	-1,969.48	-149.62	-1,819.86	-35,978.99
42	-1,969.48	-142.42	-1,827.06	-34,151.93
43	-1,969.48	-135.18	-1,834.29	-32,317.64
44	-1,969.48	-127.92	-1,841.55	-30,476.09
45	-1,969.48	-120.63	-1,848.84	-28,627.25
46	-1,969.48	-113.32	-1,856.16	-26,771.09
47	-1,969.48	-105.97	-1,863.51	-24,907.58
48	-1,969.48	-98.59	-1,870.88	-23,036.70
49	-1,969.48	-91.19	-1,878.29	-21,158.41
50	-1,969.48	-83.75	-1,885.72	-19,272.69

51	-1,969.48	-76.29	-1,893.19	-17,379.50
52	-1,969.48	-68.79	-1,900.68	-15,478.82
53	-1,969.48	-61.27	-1,908.21	-13,570.61
54	-1,969.48	-53.72	-1,915.76	-11,654.85
55	-1,969.48	-46.13	-1,923.34	-9,731.51
56	-1,969.48	-38.52	-1,930.96	-7,800.56
57	-1,969.48	-30.88	-1,938.60	-5,861.96
58	-1,969.48	-23.20	-1,946.27	-3,915.69
59	-1,969.48	-15.50	-1,953.98	-1,961.71
60	-1,969.48	-7.77	-1,961.71	0.00
	-118,168.55	-13,168.55	-105,000.00	

Annex 14. Figure 28. Cash Flow without asking for a Loan

	0	1	2	3	4	5
Revenue		35,200.00	40,480.00	46,560.00	53,600.00	61,600.00
GLASSES COST		-3,996.36	-4,595.82	-5,286.10	-6,085.37	-6,993.64
ZOHO COST+PIXEL DREAMS		-660.00	-660.00	-660.00	-660.00	-660.00
RENTING+MARKETING COSTS		-6,195.99	-6,195.99	-6,195.99	-6,195.99	-6,195.99
(-) Depreciation		-16,997.11	-16,997.11	-16,997.11	-16,997.11	-16,997.11
(=) Operating income		7,350.54	12,031.08	17,420.80	23,661.53	30,753.27
(+/-) Non-operating income/loss		0.00	0.00	0.00	0.00	0.00
(=) EBT		7,350.54	12,031.08	17,420.80	23,661.53	30,753.27
(-) Tax		-1,102.58	-1,804.66	-4,355.20	-5,915.38	-7,688.32
(=) Net income		6,247.96	10,226.42	13,065.60	17,746.15	23,064.95
(-) Initial investment	-104,423.64					
(+) Depreciation		16,997.11	16,997.11	16,997.11	16,997.11	16,997.11
(+/-) Increase in WCR	-6,195.99					
(+) Recovery WCR						
(+) Residual Value						
(=) CASH FLOW	-110,619.63	23,245.07	27,223.53	30,062.71	34,743.26	40,062.06
TIR (IRR)		11.3471%				

Source: Own Elaboration