



quantrax

Business Plan

One of the Key principle goals of sport is to create individuals who are capable of doing new things, not simply of repeating what other generations have done.

Introduction

Elite Performance Tracking Systems (EPTS) has become the norm in Professional team sport and is used to optimise performance, reduce injury risk & develop talent

Each year Injuries cost ~£100 MM in pro football in UK

In Layman terms

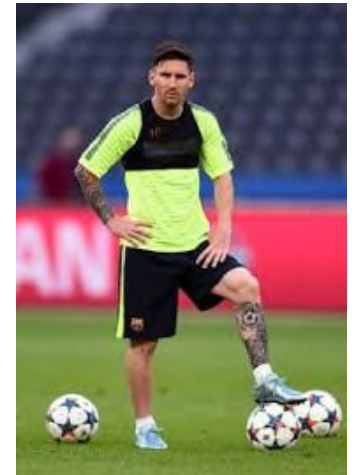
It looks to answer the key “am I’s” of;

- Am I training hard enough – (focus on volume and intensity by providing quantifiable data)
- Am I doing what I need to do – (monitor cause and effect of specific interventions)
- Am I at risk of injury- (able to determine if over or under training in a particular area)
- Am I where I need to be (Improve situational awareness)

Globally over 500 million participate in football alone,

Less than 1% (elite) of those playing football are able to afford and understand this technology

Our vision is to make this technology accessible & affordable to all

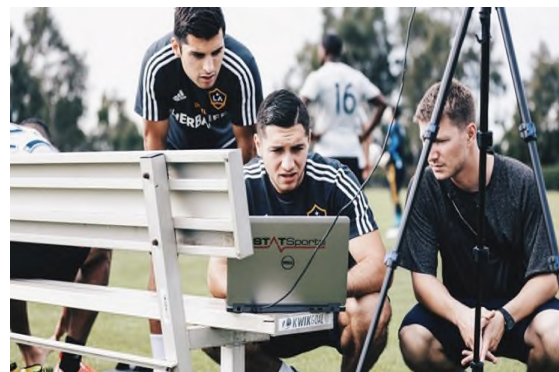


The problem

Expensive Complex data Un-portable No one tool to measure multiple variables



Team systems
£3,000-£55,000 per year
+ licences



Session	Distance(m)	Distance	Distance	Distance	Distance	Distance	Distance	Zone	Distance	HR	Average	Maximum	Speed	Speed	Speed	Speed	Speed	Speed	
Time(min:s)	per min (m)	Zone 1	Zone 2	Zone 3	Zone 4	Zone 5	Zone 6	per min	per min	Speed	Speed	per min	per min	per min	per min	per min	per min	per min	
901.9	1141.4	12.59	1122.86	908.58	2333.87	1186.2	576.04	88.45	720.7468	1.08	8	386.12	822	181.59	82	105.38	82	105.38	
979.7	951.02	6.68	259.08	900.45	493.51	286.01	231.5	7.46	2400285	1.03	753	277.88	853.31	6.41	7.6	16.64	7.6	16.64	
523.7	906.28	12.64	229.89	376.6	280.79	118.72	124.86	64	1507667	1.88	729	480.1	88.18	17.69	140.8	6.35	140.8	6.35	
1284	940.48	11.74	374.9	854.24	2048.35	801.13	409.53	4.32	7379069	1.86	762	510.02	73.02	16.47	139.8	106.72	139.8	106.72	
511.1	876.3	16.72	202.83	348.11	214.19	768.26	201.86	10.86	1338828	1.78	813	444.49	85.62	20.42	256.44	0.256	256.44	0.256	
542.6	948.81	17.11	289.66	824.93	2359.77	128.75	411.85	231.86	6479989	1.79	67	481.76	87.08	16.21	111.4	8.21	111.4	8.21	
545.8	1005.62	19.98	282.31	878.84	2892.06	1288.8	481.39	172.39	7184171	1.83	875	302.86	100.11	15.26	75.96	75.96	75.96	75.96	
548.9	1003.59	18.71	226.2	899.85	3012.01	1402.82	601.61	242.09	9438465	1.81	852	312.39	94.91	19.37	102.48	20.59	102.48	20.59	
979	834.68	13.2	320.23	3024.46	1844.42	813.1	63.39	7.84	8181213	1.74	771	425.54	87.76	19.11	83.38	83.38	83.38	83.38	
899.6	890.85	10.52	186.56	822.97	2892.84	1840.03	783.59	124.55	23411549	1.83	802	398.08	116.76	18.52	100.17	151.28	100.17	151.28	
522.5	958.62	9.46	365.24	856.39	187.81	8.96	3.65	0	6083897	0.92	57	301.11	84.5	22.22	14.94	34.22	14.94	34.22	
510.8	937.76	15.15	232.03	808.62	2444.29	1288.06	254.08	18.68	2882853	1.75	734	474.72	84.84	19.14	128.08	68.77	128.08	68.77	
408.5	898.05	11.73	823.66	973.94	2122.25	1777.81	207.13	8.25	1757311	1.86	739	421.43	88.1	175.21	110.73	83.89	110.73	83.89	
542.8	880.41	16.88	216.63	878.44	2512.29	1197.42	85.85	102.25	6585532	1.78	842	491.02	82	12.41	112.7	88.81	112.7	88.81	
4636.59	730.22	8.52	245.91	2442.13	1296.76	671.54	89.02	16.75	2209996	1.14	829	601.5	105.73	14.53	67.8	89.82	67.8	89.82	
5489.9	1318.07	15.72	801.6	4512.24	2785.81	1776.66	131.07	07	1589974	1.93	701	555.59	80.14	389.14	145.99	103.78	145.99	103.78	
567.7	971.84	16.38	123.66	3702.66	2242.34	1127.27	128.27	388.64	7520987	1.77	824	486.95	117.16	176.69	117.16	78.03	176.69	117.16	78.03
1270.7	2451.42	197.15	206.67	808.12	400.05	1210.77	2651.42	879.35	2826.87	204.22	401.05	118.27	1355	208.28	208.10	1102.22	208.10	1102.22	
863.95	201.36	56.11	940.81	49.12	89.65	263.95	201.36	56.11	940.81	49.12	119.65	57.73	548	85.99	85.99	2.11022	85.99	2.11022	
1171.11	2578.12	230.76	275.79	1012.86	821.12	1171.11	2578.12	230.76	275.79	1012.86	821.12	98.29	589	1201.43	1201.43	64169	1201.43	64169	
968	2031	220.22	245.15	209.58	485.48	801.8	2031	220.22	245.15	209.58	485.48	240.08	1312	288.43	285.41	879976	285.41	879976	
19166	2381.06	2108.73	2001.9	84.02	244.83	1200.16	2489.06	2108.73	2001.9	84.02	244.83	62.38	87	1266.61	1266.61	235158	1266.61	235158	
19709	2491.94	292.12	278.73	1221.36	483.3	1970.9	2491.94	292.12	278.73	1221.36	483.3	131.31	581	260.99	260.99	157241	260.99	157241	
1872.27	367.3	243.99	236.5	1157.06	184.49	1872.27	367.3	243.99	236.5	1157.06	184.49	1345.02	1001	871.52	871.52	812444	871.52	812444	
128.51	2447.3	218.72	281.22	128.51	483.7	128.51	2447.3	218.72	281.22	128.51	483.7	854.2	594	876.58	876.58	813754	876.58	813754	
217.48	238.56	882.1	2157.69	1463.03	82.83	217.48	238.56	882.1	2157.69	1463.03	82.83	86.46	342	743.27	743.27	237267	743.27	237267	
1298.31	248.55	254.36	2133.05	848.1	107.12	1298.31	248.55	254.36	2133.05	848.1	107.12	1180.67	329	247.17	247.17	8190038	247.17	8190038	
802.1	2100.62	96.47	433.37	871.13	28.95	802.1	2100.62	96.47	433.37	871.13	28.95	101.53	475	84.43	84.43	2347229	84.43	2347229	
1024.1	2142.41	245.85	2088.59	1101.9	183.82	1024.1	2142.41	245.85	2088.59	1101.9	183.82	881.99	842	108.59	108.59	2112416	108.59	2112416	
885.91	2296	885.79	2088.51	1125.51	51.94	885.91	2296	885.79	2088.51	1125.51	51.94	92.89	703	216.52	216.52	1413338	216.52	1413338	
104.98	2469.65	241.75	2307.76	1661.44	373.83	104.98	2469.65	241.75	2307.76	1661.44	373.83	1242.83	846	281.79	281.79	814148	281.79	814148	
1789.1	175.72	1418.88	1185.73	58.12	22.67	1789.1	175.72	1418.88	1185.73	58.12	22.67	766.01	614	97.29	97.29	812888	97.29	812888	
83348	289.3	289.3	1891.39	1714.24	184.69	83348	289.3	289.3	1891.39	1714.24	184.69	205.58	242	258.92	258.92	511026	258.92	511026	
2725.11	2415.78	2050.06	2784.41	1621.44	801.64	2725.11	2415.78	2050.06	2784.41	1621.44	801.64	1243.55	88	7795.21	7795.21	8149428	7795.21	8149428	

Less than 0.5% of those that play football are able to access the technology, Yet over *78% when surveyed would want (*Survey conducted across adult and youth,12 levels and literature review in football)

Dose-response

GPS-IMU measuring the dose and the ECG measuring the response to that dose

Software platforms measuring how did the mind respond, monitoring-predicting-prescribing activity

- **DOSE**- External load – what happened to the body

GPS IMU device measures the external forces imposed upon it

example where you were, the distance covered, how fast, impacts on the ground forces on joints/bones/Muscle tendon unit

- **RESPONSE**-Internal load- how did the body respond

ECG measure the bodies reaction to the above

example being if you ran hard then heart will beat faster causing fatigue

There is also a supplementary factor that enables for a total understanding as follows:

- dose & response- Psychological load – how did the mind respond

Wellness Rate of perceived exertion measure how you feel about what doing or done there may be an external factor that effects the above

example being, doing the same activity repeatedly becomes boring, loss of motivation, poor sleep, lifestyle these can effect both of the above. If do a repeat activity and find that not done as fast yet heart rate higher that usual, these being identifiers of fatigue/illness/injury so they all interact and dependant on one another

Many companies measure one some pair with third party a few do both but is very expensive Polar system for 10 players = £7,000+annual subscription

Market Size and Opportunity

- Estimated over 500 Mil participate in football
- UK Est 25 Mil that regularly engage in football
- Between 0.05 and 0.12% playing at Elite level
- North America sports market alone worth over USD \$70 billion
- 2 main players Catapult & Statsports young companies with Massive expansion



Catapult:

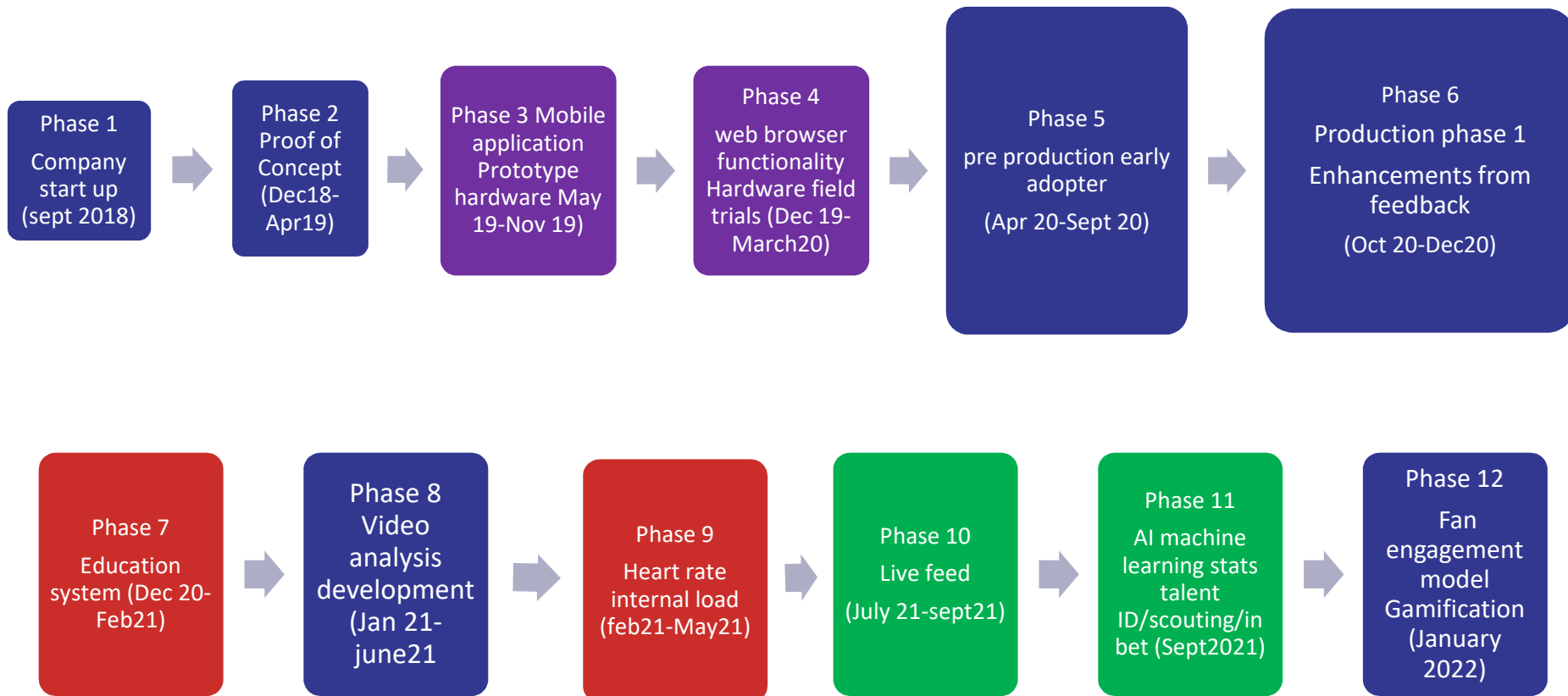
2014 the valuation has grown from 5MM, to now 450MM
(2017 purchased Playertek 5MM, to allow entry to subelite market
Q4- 28MM in prosumer market
(*Sydney Herald, Business news*)

Statsports:

2018 Secures a USD **1 billion** deal with the US Soccer Federation to supply to their Elite player program.
Q4 - 2018 launch (£249)
individual athlete tracker device
(*the times, USA Federation, Irish herald*)



Gaining insight The total picture 3 year plan Developmental Plan external – internal - total



Whilst on the developmental pathway, the system will gain traction in market place, establishing in individual and team sport
Stages are

1. early adopter sales 2. soft launch Phase (5 & 6) 3. full launch in phase 8 if all enhancements achieved.

First in UK, then Europe, USA finally ROW