SpaceApe **The Samurai Siege Analytics Stack**

24th February 2015





- 1. Samurai Siege Overview
- 2. Samurai Analytics Stack Evolution
- 3. DWH Components
- 4. User Acquisition Tools
- 5. Product Tools
- 6. CRM Tools







Samurai Siege at a Glance

Mobile real time strategy, iOS, Android

Developed in 6 months by team of 12

Live October 2013

11M Installs / 1.2M MAU / 250K DAU

\$23M in Gross Revenue to Date



Our Development Approach

Small dev teams

Creative + Science

Agile

Live Operations

Data empowered

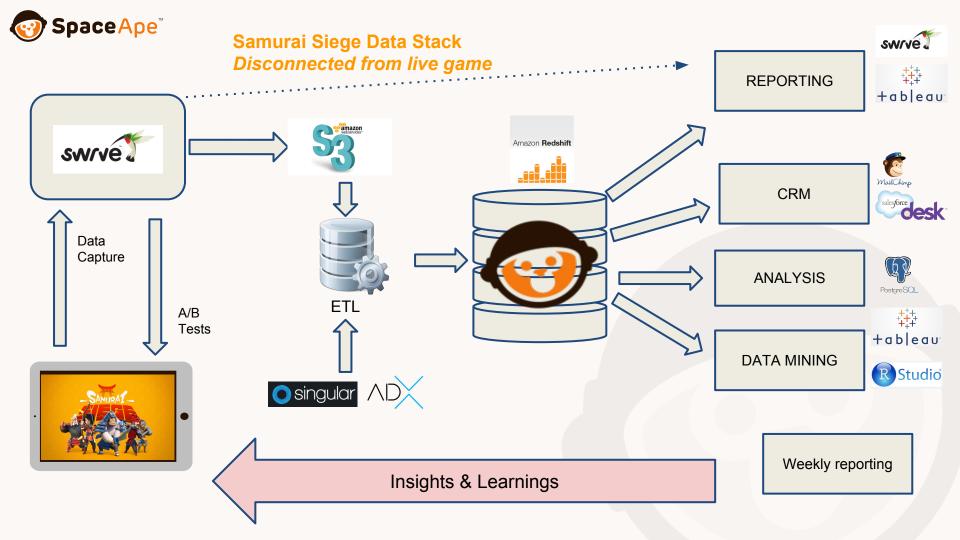
The Samurai Siege Analytics Stack Evolution



135 Billion Rows

13TB Of Compressed Data

250m x 125 columns Rows Per Day



Data Warehouse Core Data Elements

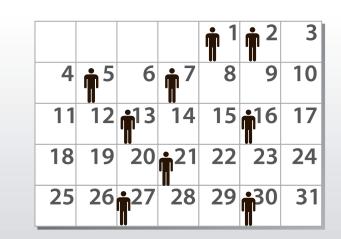


Daily Summary (Over 200 Metrics)

In Game Behaviour

Monetisation

Spend Tier



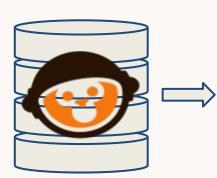
CALENDAR

Tenure

Balances

Device



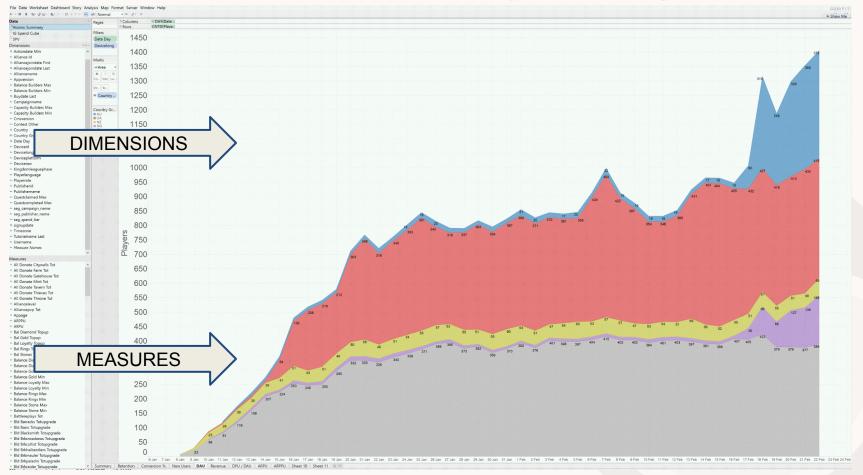




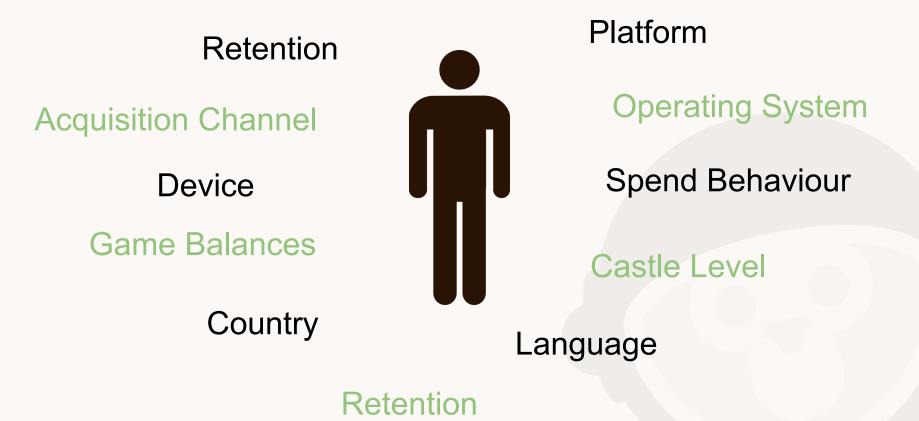
- Automated and Run Daily through an SQL Runner
- Delta Process. Clear and Insert Data for Past 3 Days
- Process completed in Minutes not Hours



Slice and Decide to your Delight!









player_id	71724ca2-c1f8-4519-8ae5-f8628a005653
villagename	XXXXXXXX
allianceid	9b9f3aaa-09ee-42f9-b53f-5f9003e59c79
alliancename	XXXXXXXX
signupdate	17/08/2013 06:39:00
max_actiondate	08/02/2015 17:58:00
controlflag	0
playerlevel	35
castlelevel	9
max_pveseq	11000
playerhonor	411
cohort	2
tenure	540



first_deviceraw	iPad2,1
first_devicelong	iPad2 - Wi-Fi
first_deviceshort	iPad2
first_playerlanguage	English
first_deviceos	ios
first_deviceplatform	ios
first_deviceid	c82848be88d034317526fa72b1b597ad
last_deviceraw	samsung SM-G900F
last_devicelong	Samsung Galaxy S5 (Europe)
last_deviceshort	Samsung Galaxy S5
last_playerlanguage	English
last_deviceos	android
last_deviceplatform	android



first_country_iso	US
last_country_iso	GB
first_country	UNITED STATES
last_country	UNITED KINGDOM
first_continent	NORTH AMERICA
last_continent	EUROPE
email	XXXXXXXXXXX
ret_d1	0
ret_d3	0
ret_d7	0
ret_d12	0

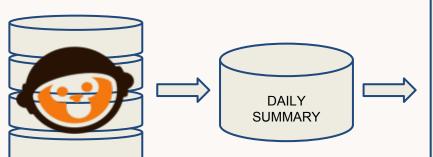


spend_first24hours	\$ -	
spend_first3days	\$ 9.00	
spend_first7days	\$ 9.00	
spend_first2weeks	\$ 9.00	
spend_last24hrs	\$ -	
spend_last0to7days	\$ -	
spend_last8to14days	\$ -	
spend_last15to21days	\$ -	
spend_last22to28days	\$ -	
spend_total	\$ 104.00	
last_purchasedate		18/04/2014 00:00:00



last_purchasedate	18/04/2014 00:00:0	0
tot_login_first7days	8	6
login_last0to7days		0
login_last8to14days		0
login_last15to21days		1
login_last22to28days		1
spendtier	Villager	
is_newbie		0
is_nonspenderprio		0
is_spendrisk		0
publishername	ORGANIC	
campaignname		
subadgroup		
publisherid		



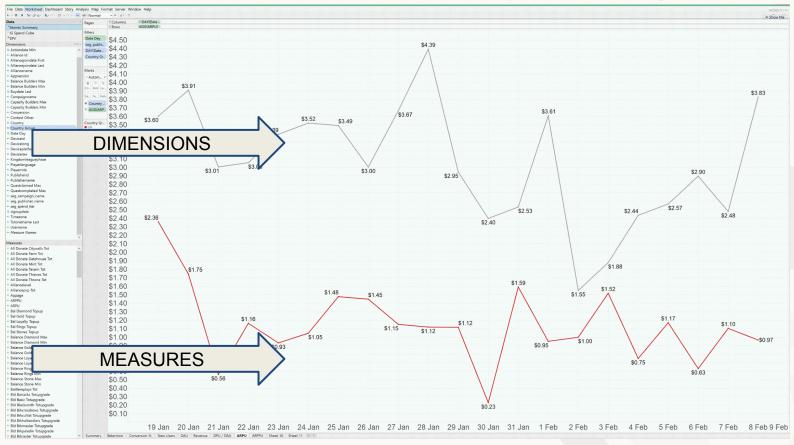


Postgre SQL

- Automated and Run Daily through an SQL Runner
- Recreated in Full every day
- Based on Daily Summary Table
- Process completed in Minutes not Hours

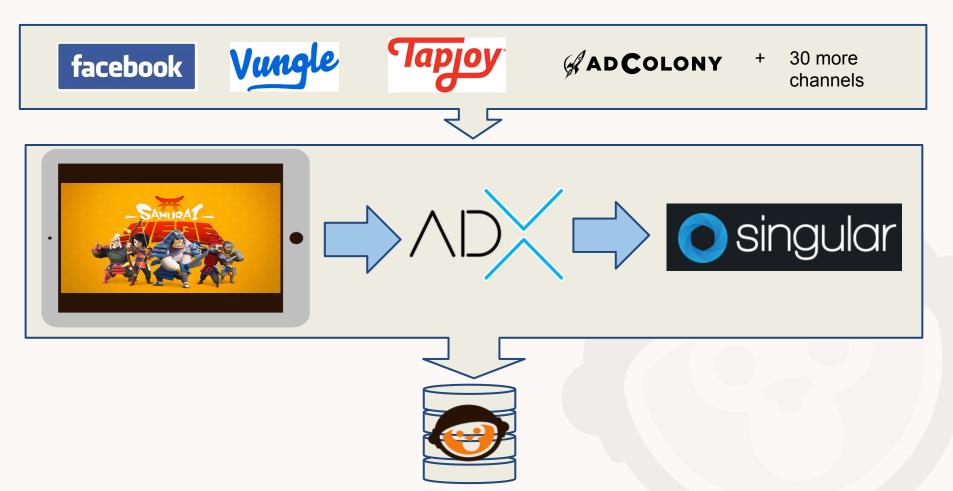


Slice and Decide to your Delight!





Attribution Data





UA Source & Cost Information

3	* reporting_date 🗸	* ad_network 🗸	* campaign_name	* campaign_type 🗸	app_id 🗸	campaign_network_id 🗸	country 🗸	impressions 🗸	clicks 🗸	installs 🗸	cost 🗸
8						Click here to define a	filter				
1 🕨	19/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	MA	NULL	3	0	0
2	20/02/2015	vungle	VUNGLE_SIEGE_iOS_ZA	iOS	643798619	NULL	ZA	1	NULL	NULL	NULL
3	14/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	NO	NULL	8	2	0.2
4	26/01/2015	nativex	NATIVEX_SIEGE_iOS_Tier4_INCENT.ios	iOS	643798619	NULL	NULL	321347	2040	1181	59.05
5	26/01/2015	applifier	APPLIFIER_SIEGE_IOS_PH	iOS	643798619	NULL	PH	NULL	76	11	1.1
6	17/02/2015	ad_colony	Samurai Siege iOS GB	iOS	643798619	NULL	ZZ	1	0	0	0
7	29/01/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	AU	NULL	5	2	0.4
8	01/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	BE	NULL	9	4	0.4
9	12/02/2015	nativex	NATIVEX_SIEGE_iOS_Test_INCENT.ios	iOS	643798619	NULL	NULL	335364	3708	432	43.2
10	05/02/2015	vungle	VUNGLE_SIEGE_iOS_NL	iOS	643798619	NULL	NL	1	NULL	NULL	NULL
11	20/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	KR	NULL	11	1	0.1
12	16/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	FR	NULL	6	0	0
13	22/02/2015	applifier	APPLIFIER_SIEGE_IOS_BE	iOS	643798619	NULL	BE	NULL	9	3	0.3
14	19/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	AU	NULL	6	0	0
15	09/02/2015	applifier	APPLIFIER_SIEGE_IOS_MX	iOS	643798619	NULL	МХ	NULL	74	12	3.6
16	26/01/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	TN	NULL	20	0	0
17	19/02/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	PH	NULL	68	15	1.5
18	26/01/2015	applifier	APPLIFIER_SIEGE_IOS_GLOBAL	iOS	643798619	NULL	VN	NULL	30	4	0.4



UA Source & Cost Information

Install Date

Campaign Network

Campaign Name

Country

Cost

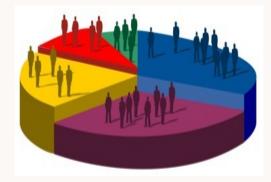
Clicks

Impressions

User Acquisition Tools



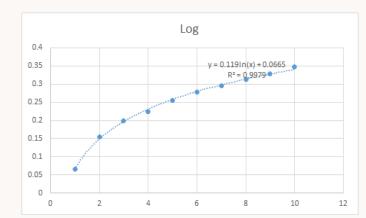
Predictive Life Time Value

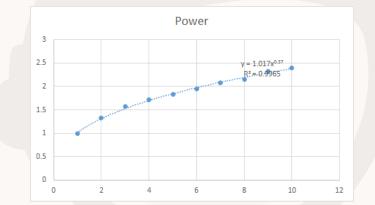


SEGMENTATION BASED ON MONETISATION AND ENGAGEMENT IN THE FIRST 7 DAYS



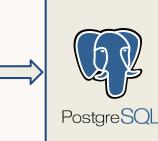
Predictive LTV











- Segment Users
- Assign Appropriate Curve based on Segmentation
- Calculate pLTV based on different time periods
- Automated and Run Daily through an SQL Runner



User Acquisition Landscape

Fragmented Area

Data Driven

Unified Dashboard is needed to scale

Fast Reaction



Dashboards & Email Alerts





Campaign Optimizer

Campaignname	Users	p-ROI	CPI	p-LTV	Cost	Spend Total	Impressions	Clicks	CTR	CVR
SIEGE_RU_IOS8.0_18-45_M_BROAD_CPA	168	1231%	\$2.71	\$33.38	\$54.26	\$131.00	16,178	3,024	1.56%	5.56%
SIEGE_JP_ANDROID4.2_18-45_M_BROAD_CPA	360	747%	\$1.80	\$13.41	\$76.95	\$323.00	13,333	3,780	2.36%	9.52%
SIEGE_AUZA_IOS8.018-45_M_STRATEGYCORE_	276	628%	\$1.44	\$9.05	\$47.33	\$49.00	12,762	2,544	1.66%	10.85%
SIEGE_JP_IOS8.0_18-45_ALL_STRATEGYCORE_CPA	2,460	440%	\$3.88	\$17.08	\$1,136.15	\$1,511.00	77,954	19,608	2.10%	12.55%
SIEGE_ENGWHALES_IOS8.013-65_ALL_	3,000	367%	\$3.35	\$12.30	\$1,197.59	\$2,211.00	209,324	31,884	1.27%	9.41%
SIEGE_KR_ANDROID4.2_18-45_M_STRATEGYCORE_CPA	5,364	291%	\$2.01	\$5.86	\$1,284.73	\$1,909.00	223,522	67,368	2.51%	7.96%
SIEGE_TW_IOS8.0_18-45_ALL_STRATEGYCORE_CPA	444	232%	\$1.85	\$4.29	\$97.72	\$157.00	18,834	4,404	1.95%	10.08%
SIEGE_US_ANDROID4.2_18-45_M_STRATEGYCORE_CPA	1,908	189%	\$1.77	\$3.34	\$401.79	\$105.00	58,958	20,148	2.85%	9.47%
SIEGE_US_ANDROID4.2_18-45_M_STRATEGYWIDE_CPA	2,364	168%	\$1.89	\$3.17	\$531.28	\$455.00	72,031	28,452	3.29%	8.31%
SIEGE_BR_IOS_ALLIPHONEIPAD_18-45_M_STRATEGYCORE_	1,056	174%	\$0.31	\$0.54	\$39.12	\$0.00	28,579	8,016	2.34%	13.17%
SIEGE_BR_IOS_ALLIPHONEIPAD_18-45_M_PCSTRATEGY_	624	162%	\$0.31	\$0.51	\$23.15	\$0.00	16,767	4,752	2.36%	13.13%
SIEGE_ENGWHALES_ANDROID4.218-45_M_	1,092	148%	\$1.53	\$2.26	\$199.18	\$111.00	23,278	8,460	3.03%	12.91%
SIEGE_JP_ANDROID4.2_18-45_M_STRATEGYCORE_CPA	924	129%	\$2.24	\$2.88	\$246.14	\$62.00	18,799	8,616	3.82%	10.72%
SIEGE_KR_ANDROID4.2_18-45_M_KOREABROAD_CPA	2,052	92%	\$2.17	\$2.00	\$530.21	\$94.00	154,444	43,260	2.33%	4.74%
SIEGE_JP_IOS8.0_18-45_M_JAPANBROAD_CPA	96	86%	\$5.00	\$4.33	\$57.19	\$27.00	12,162	1,956	1.34%	4.91%
SIEGE_AUZA_IOS8.018-45_M_ONLINESPENDERS	24	80%	\$2.37	\$1.89	\$6.77	\$0.00	3,002	324	0.90%	7.41%
SIEGE_HK_IOS8.0_18-45_M_BROAD_CPA	480	77%	\$1.36	\$1.06	\$77.97	\$5.00	26,786	6,888	2.14%	6.97%
SIEGE_AUZA_IOS8.018-45_ALL_PCSTRATEGY_	216	77%	\$1.72	\$1.33	\$44.35	\$0.00	15,878	3,144	1.65%	6.87%
SIEGE_RU_IOS8.0_18-45_M_STRATEGYCORE_CPA	228	61%	\$3.94	\$2.39	\$106.95	\$16.00	10,839	3,324	2.56%	6.86%
Grand Total	23,136	292%	\$2.24	\$6.53	\$6,158.83	\$7,166.00	1,013,430	269,952	2.22%	8.57%

Product Tools



Standard Key Performance Indicators (KPI)

Retention

Average Revenue Per User

Average Revenue Per Paying User

Daily/Monthly Active Users

New Users

Session Length

Average Sessions Per User

Spend Metrics



Additional Metrics

Spender Conversion %

Life Time Value

Re-engagement



Key Segments

Spend Tiers

Time Cohorts

Acquisition Channel

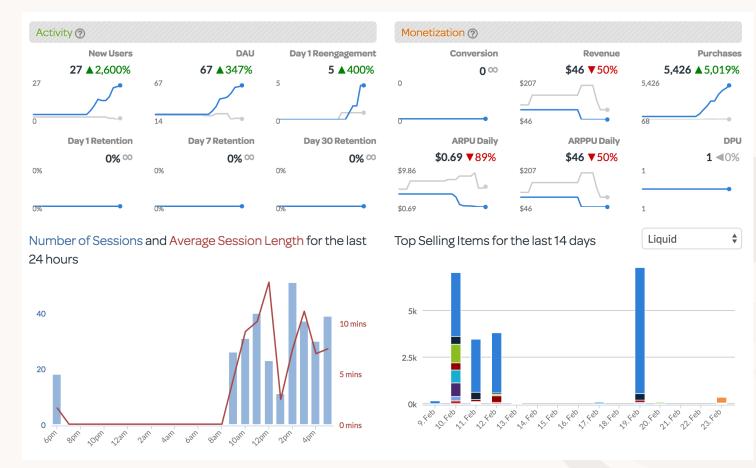
Device Platform

Country

In Game Segments e.g. Castle Level



Real-time dashboards





Set up A/B test in SWRVE + basic results

SpaceApe[™]

More advanced metrics analysis in DWH

	1. Choose Test Type 2. Build A/B Test 3. Variants 4. Confirm A/B Test Details
Test Description	Go back and modify the A/B Test Type Variants
A/B Test Name	globalSettings A/B Test Unique ID: globalSettings
A/B Test Description (Optional)	Show all attributes
Parameters	
Resources in this test	GLOBALSETTINGS (GLOBALSETTINGS) Enter a resource name Add to A/B Test
Number of Treatments	
Control Population Size	50 % ⑦
Conversion Event	Purchase (using virtual currency) In-App Purchase (using real currency) Other event
Target Users	
App version (optional)	
Users to include	 All Users Only new users who join after the start of the A/B test



More dimensions, aggregation flexibility

- Monthly / weekly revenue
- Full device split

SpaceApe[™]

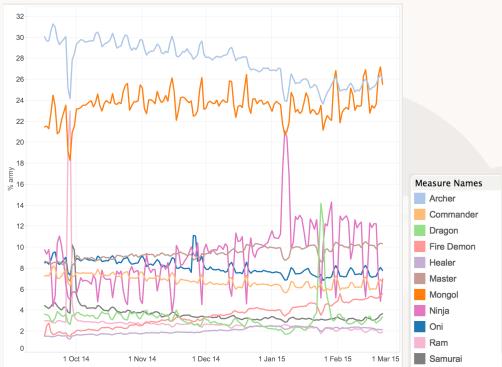
• Event type

• ...

To be applied on a lot of information

- IAPs , diamonds spending
- Economy movements
- Event performance
- Honor movement
- Behavioural changes (eg army composition)
- Community stats (time to first response, CSAT, per value tier)

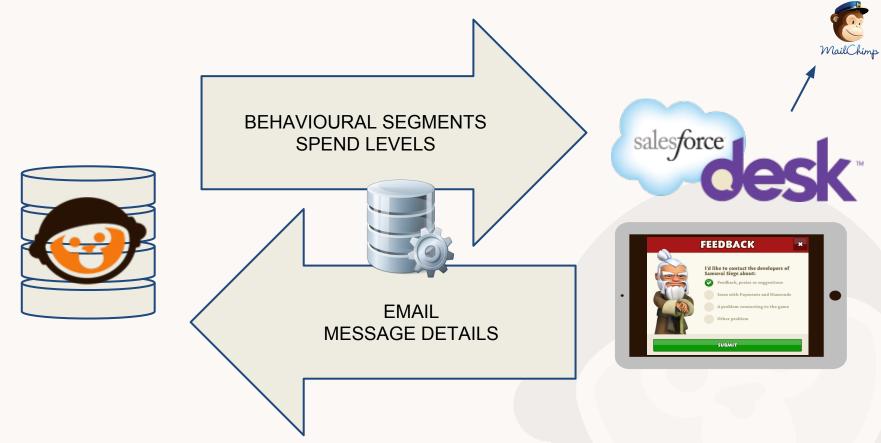
Army composition for castle 9 and 10 ? in Japan, during a event, ...



• ...

CRM Tools







CRM data defines agent workflow

selesforce desk Classic Agent 🔻				Start Routing D Quick Sea	ırch	• 🧟 ا	imon@spacea	egames.com
II 4								New
Simon 0 Assigned Cases	<<	Creat	ed - by Newest 💌	SELECT: ALL, NONE	211 80 NEW OPEN	18 0 PENDING RES	OLVED CLOS	0 BED DELETED
All Cases - Rival Kingdoms	95		CUSTOMER XXXXXXXXXXXXXXXX	SUBJECT Commanders 103 Other Problem Payments RK non-spenders Other Problem	C STATUS	UPDATED 1 minute ago	ASSIGNED	PRIORITY 8
RK - VIP	25	οδ	*****	RK non-spenders Samural Spend Risk VIP Re: VIP Update: LoW: Age of Ren	1 New	2 minutes ago	Support	4
		οē		Commanders Commoners CompHistory IOS Other Problem Other Problem	1 New	8 minutes ago	Support	8
My Cases		ΟB		Feedback IOS (RK non-spenders) Samural Spend Risk Feedback on Samural	1 New	10 minutes ago	Support	4
Players: Commanders	74	ΟΒ	XXXXXXXXXXXXX	Other Problem RK non-spenders Samural Spend Risk Other Problem	1 New	12 minutes ago	Support	4
Plavers: Ancients	1 0	οδ	XXXXXXXXXXXXX	IOS RK non-spenders Samural Spend Risk VIP line app	1 New	22 minutes ago	Support	4
,	-	οē	XXXXXXXXXXXXX	Feedback IOS RK non-spenders Samurai Spend Risk Feedback on Samurai	1 New	22 minutes ago	Support	4
Players: Ninjas	27	οδ		Ninjas RK non-spenders Spend Risk VIP (No Subject)	1 New	22 minutes ago	Support	6
Players: Raiders	6	οδ	XXXXXXXXXXXXX	Android Feedback Feedback on Samurai Siege from ishaq { 0f2f4785-f816-	1 New	29 minutes ago	Support	4
	-	οδ	XXXXXXXXXXXXX	Android Commanders Feedback Feedback on Samurai Siege from Mu Ta	1 New	38 minutes ago	Support	8
Players: Samurai	33	οB	XXXXXXXXXXXXX	Feedback Ninjas (RK non-spenders) Re: Feedback on Samurai Siege from nas	1 New	40 minutes ago	Support	6
Players: Paladins	7	ΟB	XXXXXXXXXXXXXX	Android Commanders Payments RK non-spenders Spend Risk Payment	1 New	40 minutes ago	Support	8
Players: Needing special treatm	61	ΟΒ	XXXXXXXXXXXXX	Feedback IIIS RK non-spenders Samurai Spend Risk Feedback on Samurai	1 New	40 minutes ago	Support	4
Players: Needing special treatm		ΟΒ	XXXXXXXXXXXXX	Android Commanders Feedback RK non-spenders Spend Risk VIP	1 New	42 minutes ago	Support	8
Players: Villagers	50	ΟΕ	XXXXXXXXXXXXXX	Feedback CS (RK non-spenders) Samurai Feedback on Samurai Siege from	1 New	1 hour ago	Support	4
Players: Commoners	37	ΟĒ	XXXXXXXXXXXXXX	RK non-spenders) Samural Spend Risk VIP Re: VIP Update: LoW: Age of Ren	1 New	1 hour ago	Support	4
	_	ΟΒ		Err5000 Feedback IOS Ninjas Spend Risk Feedback on Samural Siege	1 New	1 hour ago	Support	6
Players: everyone else	126	ΟΒ	XXXXXXXXXXXXXX	Commanders CompHistory (IOS Other Problem) (RK non-spenders) Spend Risk	1 New	1 hour ago	Support	8
English Queue	309	ΟΒ	XXXXXXXXXXXXXX	Feedback 00 Samural Spend Risk Feedback on Samurai Siege from	1 New	1 hour ago	Support	4
		ΟĒ		Connection Err7012 ErrorCode OS Connection problem with Samurai	1 New	1 hour ago	Support	4
Japanese Queue	12	ΟΒ		Other Problem Other Problem with Samurai Siege - from Skateleton {	1 New	1 hour ago	Support	4
23 🕨	*	ΟΒ	XXXXXXXXXXXXXX	Android (Feedback) (RK non-spenders) (Spend Risk) (Villagers) Feedback on	1 New	1 hour ago	Support	4

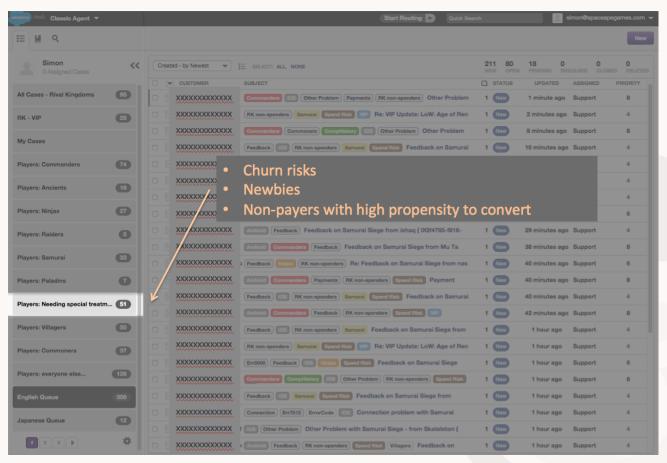


CRM data defines agent workflow

salesforce desk Classic Agent 🔻	Start Routing 💽 Quick Se	Search simon@spaceapegames.co	om 👻
			New
Simon Cases	Created - by Newest 💌 😫 SELECT: ALL, NONE	211 80 18 0 0 0 NEW OPEN PENDING RESOLVED CLOSED DELS	
	C CUSTOMER SUBJECT	STATUS UPDATED ASSIGNED PRIORIT	TY I
All Cases - Rival Kingdoms 95	Commanders OD Other Problem Payments RK non-spenders Other Problem	n 1 Now 1 minute ago Support 8	
RK - VIP 25	KXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	n 1 New 2 minutes ago Support 4	
	Commanders Commoners Complicatory IOS Other Problem Other Problem	1 Now 8 minutes ago Support 8	
My Cases	XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ii 1 New 10 minutes ago Support 4	
Players: Commanders 74	Do first (ICS Other Problem (RK non-spenders) (Samural) (Spend Rink) Other Problem	1 Now 12 minutes ago Support 4	
Players: Ancients	C AAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA	1 Now 22 minutes ago Support 4	
Players. Ancients	C S XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	ii 1 Now 22 minutes ago Support 4	
Players: Ninjas 27	C S XXXXXXXXXXXXX (Ninjas RK non-spenders) Spend Risk VP (No Subject)	1 Now 22 minutes ago Support 6	
Players: Raiders 5	KXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 29 minutes ago Support 4	
	C S XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 38 minutes ago Support 8	
Players: Samurai 33	C S XXXXXXXXXXXX I Feedback Minus (RK non-spenders) Re: Feedback on Samural Siege from nas	s 1 Now 40 minutes ago Support 6	
Players: Paladins	C & XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 40 minutes ago Support 8	
	C S XXXXXXXXXXXXXX Feedback IOS (RK non-spenders) Samural Spend Risk Feedback on Samural	ii 1 Now 40 minutes ago Support 4	
Players: Needing special treatm 51	C S XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 42 minutes ago Support 8	
Players: Villagers 50	C SXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 1 hour ago Support 4	
Players: Commoners 37	C S XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	n 1 Now 1 hour ago Support 4	
	C Err5000 Feedback (00 Notes Spend Nisk Feedback on Samurai Siege	1 Now 1 hour ago Support 6	
Players: everyone else 126	Do last Commanders CompHistory TOS Other Problem (RK non-spenders) Spend Risk	1 Now 1 hour ago Support 8	
English Queue 309	KXXXXXXXXXXXXXX Feedback (10) Samural Spend Risk) Feedback on Samural Siege from	1 Now 1 hour ago Support 4	
	Connection Err7012 ErrorCode Connection problem with Samurai	1 Now 1 hour ago Support 4	
Japanese Queue	XXXXXXXXXXXXXX K Other Problem Other Problem with Samurai Siege - from Skateleton {	1 Now 1 hour ago Support 4	
123) *	EXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX	1 Now 1 hour ago Support 4	

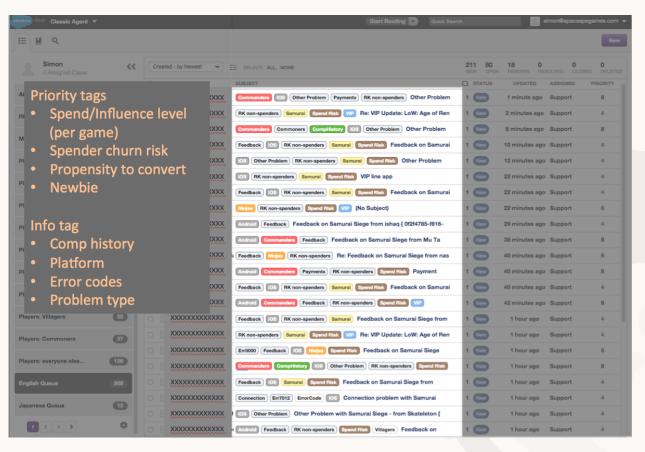


CRM data defines agent workflow



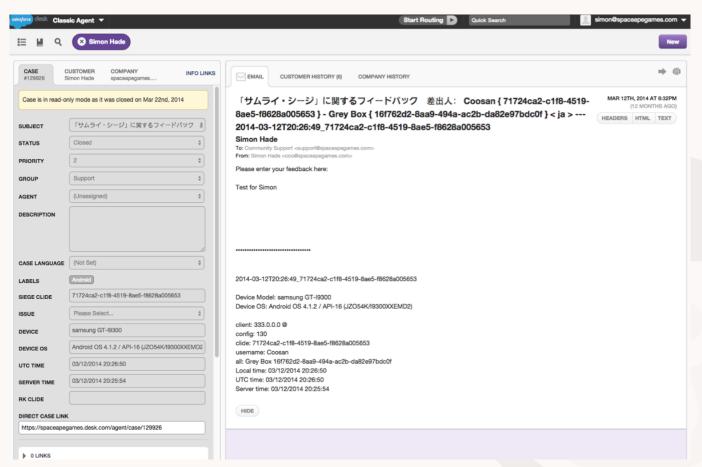


Tickets augmented with CRM data





Tickets augmented with CRM data





Tickets augmented with CRM data

Starter Pa

Matching Permissio Claimed

TW Energ

Total Boo Sessions Without Battling: Sessions Without Training:

Current L League S Time: League F View M

Profile								
Clide:	71724ca2-c	:1f8-4519-8a	e5-f8628a005	653 Ban				
Fullname:	Nasedah&							
XP:	836							
Level:	35							
LastActiveTime:	February 8t	h 2015, 17:5	8:19 +00:00					
LastLoginTime:	February 8th 2015, 17:58:00 +00:00							
LastSpendTime:	October 29	October 29th 2014, 17:03:06 +00:00 🗎 🕑						
CreatedTime:	July 25th 20	013, 15:13:52	+01:00					
CloakExpiry:	February 26	ith 2015, 18:	55:46 +00:00	ii .				
ShieldExpiry:	N/A Ø							
Trophies:	398 O							
Total Spent Gem:	448931							
Total Payments:	149.8							
Clan:	Bevy Fanclub							
Clan Join Time:	January 17th 2015, 21:05:37 +00:00							
Reward Token IDs:	tk_archertower x tk_bombtrap x tk_bs x tk_chain x tk_den x tk_dra x							
	tk_freezetrap x tk_gatling x tk_hea x							
	tk_ji x tk_mas x tk_oni x tk_scroll							
	x tk_sm	ith x tk	snowball x	tk_temple				
	x token_archer x token_cannon x							
	token_commander x token_freeze x							
	token_ninja	x token	ram x tok	en_walls				
League History	attr D	TI OUVED		n1 - E				
International Control of Control	Nami Chinks 147 Aug 277 A	Church B		×				
-	Parties 1	10.0	Tot .					
Anna Anna Anna Anna Anna Anna Anna Anna		100	ta ta	- 61				
		100	14	- 60				
-		1948	1.0	×				
Case Tanay			1.0					
			**					
-			1.0	_				
Care -	9		tur i					
Transferration (Contraction)		148	14					
			14					
the state			14	- 10				
177000			14					

Username:	hadesan 🗃
Game Center:	G:556234759 🛍
Google Plus:	
Facebook:	1 a
Device Cintas:	€ 2e83d716-90d2-4b7c-9033-6921d5a93e72
	311de637-9696-47bb-8643-04c77163894f
	29a3d166-2337-472a-80c8-526a21cdd86e
	Attach
Device Tokens:	c82848be88d034317526fa72b1b597ad 📋

Currencies

Premium:	50112	TopUp
Liquid:	19712	TopUp
Solid:	37949	TopUp
Gas:	3020	TopUp

Sessions

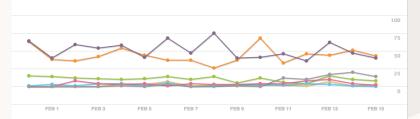
Start	End
December 17th 2014, 23:35:13 +00:00	December 17th 2014, 23:37:14 +00:00
December 19th 2014, 11:14:30 +00:00	December 19th 2014, 11:18:35 +00:00
December 19th 2014, 21:29:46 +00:00	December 19th 2014, 21:32:49 +00:00

		Battle I	Defens	se				
Pack			Attack Time	Attacker	Damage%	Trophies	Solid Mines+Storage	Liq Mir
Pack	0 (AP_7: June 15th 2014, 17:29:52 +01:00 @ 0 (AP_8: August 31st 2014, 15:11:05 +01:00 @ 0 (AP_9: September 21st 2014, 19:38:48 +01:00 @ 0 (AP_10: October 13th 2014, 22:09:05 +01:00 @ 0 (AP_11: October 31st 2014, 21:37:47 +00:00 @	Download	February 19th 2015, 18:55:11 +00:00	Katana	196	-18/21	2099	111
	0 IAP_12: November 10th 2014, 16:02:12 +00:00 0 IAP_15: November 15th 2014, 21:40:43 +00:00 0 IAP_16: December 15th 2014, 20:02:55 +00:00	Download	February 15th 2015, 15:40:25 +00:00	东皇大一	100%	9/-10	792257	455
	 ■ ■ 0 IAP_17: December 20th 2014, 11:14:40 +00:00 ■ ■ 0 IAP_19: January 1st 2015, 22:17:22 +00:00 ■ 0 IAP_20: January 22nd 2015, 12:11:53 +00:00 	Download	February 14th 2015, 23:38:59 +00:00	Aregim893	100%	8/-10	538509	45:
	0 IAP_21: February 2nd 2015, 16:27:53 +00:00 0 IAP_22: February 11th 2015, 17:58:13 +00:00		P.4	A.4.1.4				~~~
g Type	CombatScore Honour		ary 17th 2 7:04 +00:1		January 17th 22:19:49 +00			
ions:	GlientLogging GlientConsole		ary 18th 2 2:40 +00:1		January 18th 15:43:02 +00			
virals:	VRL_FACEBOOK_SIGN_IN VRL_FOLLOW_AT_SAMURIA_SIEGE		ary 19th 2 5:56 +00:1		January 19th 00:47:37 +00			
	VRL_FACEBOOK_LIKE_SAMURIA_SIEGE VRL_RATE_APP VRL_FOLLOW_AT_SPACE_APE Reset	08:10 Janu	January 20th 2015, January 20th 2015, 08:10:04 +00:00 08:10:38 +00:00 January 27th 2015, January 27th 2015, 16:27:42 +00:00 16:28:14 +00:00					
iĝh:	Presex Quantity: 3 RechargeStartTime: November 6th 2014, 23:24:32 400:00 War: 11a26bb3-0556-4044-86b6-5ac56db25ab8	Ga	chas		16:28:14 +00		L	
osts:	8	Id		Last claim		Clear		
5	9			December : 22:26:54 +(00:00	Clear		
s :	23	Win	_		ds Claimed	12		
League:	league1			Payment	_			
Start	undefined NaNth 0NaN, NaN:NaN:NaN +00:00		(
Room:	c07b0c6d-194f-45ca-93f1-f97c28ccb759 Clear League State			"username": "K "xp": 1963, "Level": 98.			1799*,	l
Mines Mute	View Village View Raw Player Loot View Node Progress Send Push Mule Global Chat Reset Player Session ay Attack History Tournament History			"localeKey": " "shieldExpiry" "cloakedBy": " "lastActiveTim "clanId": "Sce "clanMembershi "lastTroopReau	: 1424785275747, 1424785275747, 1895509F-3db7-41 e": 1424766866639 c9921-9980-4294 pD7: "1680c804 estTime": 142475	13-9ddf-1c7f3 9, a83a-bd66df58 a48a-4433-a4f 19561494,		
	League History View Rewards Flag Cluster51	_		"auditBeginTim	e": 142476686348 : 1424766866392, emEDs": [ence_5", sck_4", sck_1",			I



Enables value based SLAs

LEGEND:	ANCIENTS CON	IMANDERS COMI	MONERS	ENDER_PRIO PALADIN	S RAIDERS RIVA	L KINGDOMS
NEW CASES	CASE RESOLVES	1ST RESOLVED	CASE REOPENS	AVERAGE	TIME TO 1ST RESPONSE	AVERAGE HANDLE TIME
62	97	61	39	3	04:06:36	00:33:24
699	974	691	283	2	06:31:27	00:26:12
79	97	75	29	3	05:31:32	00:26:18
	228	181	44	2	21:33:34	00:10:03
36	48	32	17	3	08:53:25	00:35:52
33	47	33	16	3	05:32:04	00:32:43
818	1,130	878	258	2	10:19:42	00:21:08



	New Cases	Case Resolves	1st Resolved	Case Reopens	Average Interactions	Time to 1st Response	Average Handle Time
Sunday, February 15, 2015							
Ancients	2	6	5	3	1	10:24:39	00:07:24
Commanders	43	50	39	15	1	12:27:05	00:08:53
Commoners	14	19	14	5	2	04:48:10	00:04:39
NonSpender_Prio	8	5	5	0	1	20:52:16	00:05:05
 Paladins 	3	3	3	1	2	02:17:38	00:12:26
Raiders	0	0	0	1	1	00:00:00	00:00:00
Rival Kingdoms	40	47	38	14	2	05:50:10	00:07:59

Learnings / Tips!



Decide from the Beginning if you want to create a Data Warehouse



Do not collect everything!



Make Data Accessible



Keep your finger on the pulse



Automate!

What's Next in Data for Space Ape Games?



Using Predictive Analytics to Trigger In-App Messages/Offers for users.



Enhancing our Machine Learning capabilities



Network / Cross Platform View and Analysis

Thankyou!



Additional Information

Website:

http://www.spaceapegames.com/

Blog:

http://weare-bananas.tumblr.com/

Rival Kingdoms:

http://www.rivalkingdomsgame.com/

Questions:

richard@spaceapegames.com