



B2C Cohort Analysis – Why So Critical?

Danny Cohen
General Partner, Viola
Ventures



Key Points to think About in the Analysis

- Compare to gross profit
- What happens to users that churned and came back?
 - Leave at original cohort -> Higher LTV
 - Move to new cohort -> Lower CAC
 - If came back through CAC -> Must be in new cohort
- % is good as it relates to users
- \$ is important in cases where it is not subscription (Commerce, UBP)
- Tables not graphs



E-Commerce Example (1)

	New Customers	Total Orders	Orders/ Customer		Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Jan	1,808	2,670	1.48		\$147,656	\$7,924	\$3,365	\$3,035	\$3,672	\$3,927	\$3,012	\$1,864	\$1,191	\$257	\$465	\$603
Feb	3,141	4,418	1.41			\$253,821	\$9,615	\$4,720	\$7,191	\$4,937	\$4,231	\$1,816	\$1,338	\$428	\$342	\$548
Mar	3,037	4,451	1.47				\$241,168	\$9,195	\$8,149	\$6,687	\$4,949	\$2,684	\$2,137	\$1,042	\$849	\$498
Apr	3,136	4,914	1.57					\$216,164	\$19,932	\$9,020	\$8,928	\$3,155	\$1,720	\$551	\$281	\$796
May	10,692	14,935	1.40						\$710,099	\$36,546	\$24,427	\$10,519	\$4,689	\$2,429	\$1,622	\$1,285
Jun	8,432	11,438	1.36							\$627,259	\$40,639	\$11,588	\$6,413	\$1,713	\$1,229	\$1,463
Jul	9,264	12,541	1.35								\$661,405	\$28,142	\$9,222	\$4,115	\$2,011	\$2,011
Aug	4,099	5,497	1.34									\$298,807	\$14,038	\$3,219	\$1,341	\$1,010
Sep	1,940	2,528	1.30										\$145,665	\$5,513	\$1,357	\$1,363
Oct	966	1,289	1.33											\$74,229	\$2,551	\$1,095
Nov	622	811	1.30												\$46,669	\$1,954
Dec	606	837	1.38													\$43,330

E-Commerce Example (2)

		New Customers	Total Orders	Orders/ Customer	2019 Revenue												2020 Revenue												2021 Revenue							Total Revenue	Blended CPA	Marketing Spend+ PR	COGS	Marketing Spend + COGS	ROI
					JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL											
					\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$											
2019	JUN	159	385	2.4	\$ 8,661	\$ 79	\$ 146	\$ 560	\$ 1,041	\$ 321	\$ 486	\$ 1,326	\$ 473	\$ 486	\$ 332	\$ 377	\$ 408	\$ 501	\$ 336	\$ 586	\$ 443	\$ 618	\$ 62	\$ 334	\$ 71	\$ 537	\$ 670	\$ 326	\$ 469	\$-	\$ 19,538	\$ 30	\$ 1,833	\$ 4,885	\$ 6,417	966%					
	JUL	275	716	2.6		\$ 8,657	\$ 1,041	\$ 2,293	\$ 821	\$ 900	\$ 1,098	\$ 793	\$ 708	\$ 1,135	\$ 721	\$ 865	\$ 540	\$ 245	\$ 617	\$ 464	\$ 247	\$ 651	\$ 663	\$ 360	\$ 434	\$ 904	\$ 358	\$ 702	\$ 448	\$-	\$ 27,764	\$ 27	\$ 7,445	\$ 6,341	\$ 14,386	280%					
	AUG	852	1656	1.9			\$ 11,806	\$ 6,738	\$ 2,963	\$ 1,792	\$ 1,510	\$ 1,836	\$ 1,007	\$ 1,478	\$ 2,007	\$ 1,562	\$ 967	\$ 1,683	\$ 599	\$ 542	\$ 788	\$ 678	\$ 481	\$ 965	\$ 580	\$ 479	\$ 1,126	\$ 772	\$ 647	\$ 212	\$ 45,625	\$ 46	\$ 38,904	\$ 11,406	\$ 50,310	88%					
	SEP	681	1242	1.8				\$ 11,921	\$ 2,866	\$ 4,400	\$ 990	\$ 1,916	\$ 826	\$ 1,057	\$ 1,144	\$ 1,589	\$ 753	\$ 1,056	\$ 765	\$ 938	\$ 701	\$ 760	\$ 713	\$ 976	\$ 406	\$ 357	\$ 212	\$ 521	\$ 259	\$ 213	\$ 35,398	\$ 66	\$ 46,379	\$ 8,549	\$ 54,029	59%					
	OCT	320	695	2.2					\$ 11,476	\$ 2,670	\$ 964	\$ 1,539	\$ 918	\$ 1,655	\$ 1,500	\$ 652	\$ 846	\$ 335	\$ 417	\$ 799	\$ 722	\$ 939	\$ 143	\$ 669	\$ 323	\$ 705	\$ 105	\$ 506	\$ 305	\$ 162	\$ 28,308	\$ 64	\$ 20,633	\$ 7,027	\$ 27,730	103%					
	NOV	520	1223	2.4						\$ 21,087	\$ 6,028	\$ 2,906	\$ 2,431	\$ 2,626	\$ 2,221	\$ 1,987	\$ 1,479	\$ 1,767	\$ 1,379	\$ 1,506	\$ 1,426	\$ 1,559	\$ 1,322	\$ 371	\$ 1,202	\$ 456	\$ 1,316	\$ 958	\$ 1,052	\$ 289	\$ 55,546	\$ 42	\$ 21,975	\$ 13,887	\$ 35,562	190%					
DEC	475	1174	2.5							\$ 19,598	\$ 6,869	\$ 2,694	\$ 3,839	\$ 2,475	\$ 2,779	\$ 1,833	\$ 1,933	\$ 1,654	\$ 1,996	\$ 739	\$ 1,251	\$ 1,416	\$ 889	\$ 205	\$ 1,078	\$ 543	\$ 947	\$ 559	\$ 358	\$ 54,354	\$ 46	\$ 21,885	\$ 13,588	\$ 35,474	186%						
2020	JAN	508	1220	2.4							\$ 19,566	\$ 7,528	\$ 3,258	\$ 4,818	\$ 2,494	\$ 2,067	\$ 1,238	\$ 1,421	\$ 1,686	\$ 1,521	\$ 1,472	\$ 908	\$ 721	\$ 933	\$ 655	\$ 651	\$ 1,032	\$ 468	\$ 123	\$ 52,549	\$ 46	\$ 22,896	\$ 15,137	\$ 36,033	72%						
	FEB	452	1199	2.7								\$ 16,802	\$ 7,656	\$ 3,841	\$ 3,050	\$ 3,228	\$ 2,459	\$ 2,046	\$ 2,201	\$ 1,901	\$ 2,348	\$ 1,779	\$ 1,326	\$ 1,241	\$ 892	\$ 788	\$ 1,211	\$ 2,009	\$ 755	\$ 55,344	\$ 32	\$ 14,673	\$ 13,836	\$ 28,509	283%						
	MAR	705	1500	2.1									\$ 36,963	\$ 5,404	\$ 4,683	\$ 2,643	\$ 3,036	\$ 2,399	\$ 1,519	\$ 1,909	\$ 2,150	\$ 1,016	\$ 1,374	\$ 2,098	\$ 721	\$ 540	\$ 1,437	\$ 874	\$ 108	\$ 68,873	\$ 24	\$ 16,740	\$ 7,218	\$ 33,958	309%						
	APR	750	2231	3.0										\$ 40,093	\$ 11,269	\$ 4,492	\$ 4,547	\$ 3,252	\$ 4,829	\$ 2,889	\$ 3,441	\$ 2,362	\$ 2,240	\$ 1,043	\$ 2,913	\$ 1,737	\$ 2,272	\$ 1,968	\$ 491	\$ 89,697	\$ 21	\$ 16,602	\$ 22,424	\$ 38,027	431%						
	MAY	1935	4084	2.1										\$ 89,396	\$ 16,391	\$ 6,303	\$ 5,906	\$ 5,394	\$ 4,302	\$ 4,304	\$ 3,831	\$ 3,532	\$ 2,993	\$ 2,455	\$ 2,710	\$ 1,638	\$ 1,828	\$ 630	\$ 161,263	\$ 14	\$ 26,942	\$ 27,816	\$ 64,758	421%							
	JUN	782	2097	2.7										\$ 39,479	\$ 7,351	\$ 4,573	\$ 4,194	\$ 2,883	\$ 3,465	\$ 2,665	\$ 2,655	\$ 1,546	\$ 1,313	\$ 2,040	\$ 2,273	\$ 1,049	\$ 796	\$ 76,078	\$ 32	\$ 25,008	\$ 19,020	\$ 44,027	228%								
	JUL	1095	2398	2.2										\$ 52,816	\$ 5,480	\$ 4,544	\$ 4,052	\$ 7,920	\$ 2,462	\$ 2,041	\$ 1,414	\$ 2,057	\$ 2,072	\$ 2,399	\$ 2,166	\$ 544	\$ 89,975	\$ 16	\$ 7,382	\$ 22,494	\$ 39,875	388%									
	AUG	783	1912	2.4															\$ 37,697	\$ 7,305	\$ 4,327	\$ 3,511	\$ 3,681	\$ 3,536	\$ 2,339	\$ 2,396	\$ 1,543	\$ 2,007	\$ 1,164	\$ 569	\$ 69,576	\$ 25	\$ 19,544	\$ 7,344	\$ 36,888	266%					
	SEP	541	1416	2.6															\$ 27,343	\$ 4,619	\$ 2,896	\$ 3,480	\$ 2,910	\$ 2,410	\$ 1,795	\$ 3,166	\$ 1,792	\$ 1,640	\$ 787	\$ 53,002	\$ 47	\$ 25,364	\$ 13,250	\$ 38,434	158%						
	OCT	530	1139	2.1															\$ 26,921	\$ 4,544	\$ 2,338	\$ 2,773	\$ 2,787	\$ 1,613	\$ 2,068	\$ 1,438	\$ 961	\$ 623	\$ 46,266	\$ 44	\$ 23,488	\$ 11,567	\$ 35,054	148%							
	NOV	600	1707	2.8															\$ 36,235	\$ 4,551	\$ 4,378	\$ 1,730	\$ 3,460	\$ 1,667	\$ 3,399	\$ 1,617	\$ 498	\$ 51,534	\$ 52	\$ 31,423	\$ 14,354	\$ 45,806	137%								
	DEC	603	1142	1.9															\$ 39,026	\$ 4,169	\$ 2,258	\$ 4,526	\$ 1,759	\$ 2,157	\$ 1,965	\$ 882	\$ 56,742	\$ 52	\$ 31,620	\$ 14,316	\$ 45,806	135%									
2021	JAN	455	994	2.2																			\$ 25,374	\$ 4,648	\$ 2,026	\$ 2,077	\$ 1,966	\$ 2,022	\$ 461	\$ 38,575	\$ 62	\$ 27,990	\$ 9,644	\$ 37,633	103%						
	FEB	396	969	2.4																				\$ 22,299	\$ 4,383	\$ 2,464	\$ 1,890	\$ 1,361	\$ 622	\$ 33,130	\$ 64	\$ 33,432	\$ 8,277	\$ 41,709	74%						
	MAR	380	988	2.6																					\$ 22,794	\$ 4,625	\$ 3,385	\$ 1,447	\$ 420	\$ 32,652	\$ 80	\$ 30,499	\$ 3,155	\$ 38,654	80%						
	APR	374	855	2.3																						\$ 24,048	\$ 3,361	\$ 2,106	\$ 985	\$ 30,499	\$ 70	\$ 26,282	\$ 2,625	\$ 33,907	87%						
	MAY	334	693	2.1																							\$ 21,014	\$ 2,657	\$ 208	\$ 25,969	\$ 79	\$ 26,347	\$ 3,927	\$ 32,344	68%						

Comments

- Note 2nd example includes the ratio of net revenue / CAC (Marketing + PR) + COGS
- Note the high ROI and constant contribution from cohorts -> Ability to spend more

App Subscription Example

	New Paid Customers	Average Sub Price	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Jan	800	\$ 5.00	\$ 4,000	\$ 3,400	\$ 3,060	\$ 2,142	\$ 1,714	\$ 857	\$ 771	\$ 694	\$ 555	\$ 389	\$ 369	\$ 332
Feb	900	\$ 5.50		\$ 4,950	\$ 4,455	\$ 3,119	\$ 2,495	\$ 1,247	\$ 1,123	\$ 1,010	\$ 808	\$ 566	\$ 538	\$ 484
Mar	1,000	\$ 5.40			\$ 5,400	\$ 3,780	\$ 3,024	\$ 1,512	\$ 1,361	\$ 1,225	\$ 980	\$ 686	\$ 652	\$ 586
Apr	1,000	\$ 6.00				\$ 6,000	\$ 4,800	\$ 2,400	\$ 2,160	\$ 1,944	\$ 1,555	\$ 1,089	\$ 1,034	\$ 931
May	1,200	\$ 6.20					\$ 7,440	\$ 3,720	\$ 3,348	\$ 3,013	\$ 2,411	\$ 1,687	\$ 1,603	\$ 1,443
Jun	1,000	\$ 5.80						\$ 5,800	\$ 5,220	\$ 4,698	\$ 3,758	\$ 2,631	\$ 2,499	\$ 2,249
Jul	800	\$ 5.70							\$ 4,560	\$ 4,104	\$ 3,283	\$ 2,298	\$ 2,183	\$ 1,965
Aug	800	\$ 6.30								\$ 5,040	\$ 4,032	\$ 2,822	\$ 2,681	\$ 2,413
Sep	1,000	\$ 6.40									\$ 6,400	\$ 4,480	\$ 4,256	\$ 3,830
Oct	1100	\$ 6.10										\$ 6,710	\$ 6,375	\$ 5,737
Nov	1200	\$ 6.00											\$ 7,200	\$ 6,480
Dec	1500	\$ 6.20												\$ 9,300

Comments

- Average subscription changes based on blend of monthly/quarterly/yearly
- Usually, every month there is a drop. I took random churn numbers in this example
- Do note that I did not show the “Free” users vs. “paid” users. They should be presented as well.
- Late conversions should be allocated to their original cohort.

SMB Example

	New Customers	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21	Dec-21	Jan-22	Total	Marketing Spend	CAC	ROI
Jan-21	8	\$718	\$634	\$645	\$763	\$1,001	\$1,085	\$792	\$765	\$771	\$792	\$709	\$706	\$584	\$9,965	\$13,727	\$1,716	72.59%
Feb-21	25		\$1,688	\$1,389	\$1,226	\$1,675	\$1,905	\$1,697	\$1,693	\$1,845	\$1,765	\$1,723	\$1,842	\$1,785	\$20,233	\$24,319	\$973	83.20%
Mar-21	26			\$4,273	\$2,844	\$1,528	\$2,415	\$1,388	\$1,258	\$2,092	\$1,904	\$1,297	\$1,290	\$1,339	\$21,628	\$38,920	\$1,497	55.57%
Apr-21	20				\$2,192	\$1,735	\$2,023	\$1,767	\$1,503	\$1,370	\$1,985	\$1,649	\$1,635	\$1,552	\$17,411	\$33,419	\$1,671	52.10%
May-21	15					\$3,126	\$2,178	\$1,988	\$2,400	\$2,405	\$2,413	\$1,766	\$1,759	\$1,545	\$19,580	\$29,120	\$1,941	67.24%
Jun-21	17						\$2,337	\$1,688	\$1,632	\$1,867	\$1,821	\$1,423	\$1,183	\$1,062	\$13,013	\$9,942	\$585	130.89%
Jul-21	24							\$3,514	\$3,053	\$2,660	\$2,962	\$3,030	\$2,891	\$2,909	\$21,019	\$15,081	\$628	139.37%
Aug-21	17								\$2,114	\$2,074	\$2,583	\$2,417	\$2,205	\$2,222	\$13,615	\$14,739	\$867	92.37%
Sep-21	15									\$1,867	\$1,795	\$1,669	\$1,697	\$1,717	\$8,745	\$15,715	\$1,048	55.65%
Oct-21	8										\$2,503	\$1,512	\$1,334	\$1,260	\$6,609	\$17,521	\$2,190	37.72%
Nov-21	10											\$1,883	\$1,107	\$1,809	\$4,799	\$19,662	\$1,966	24.41%
Dec-21	11												\$2,361	\$2,103	\$4,464	\$24,040	\$2,185	18.57%
Grand Total		\$718	\$2,322	\$6,307	\$7,025	\$9,065	\$11,943	\$12,834	\$14,418	\$16,951	\$20,523	\$19,078	\$20,010	\$19,887	\$161,081		\$1,439	

Contact us:
Dannyc@viola.vc

