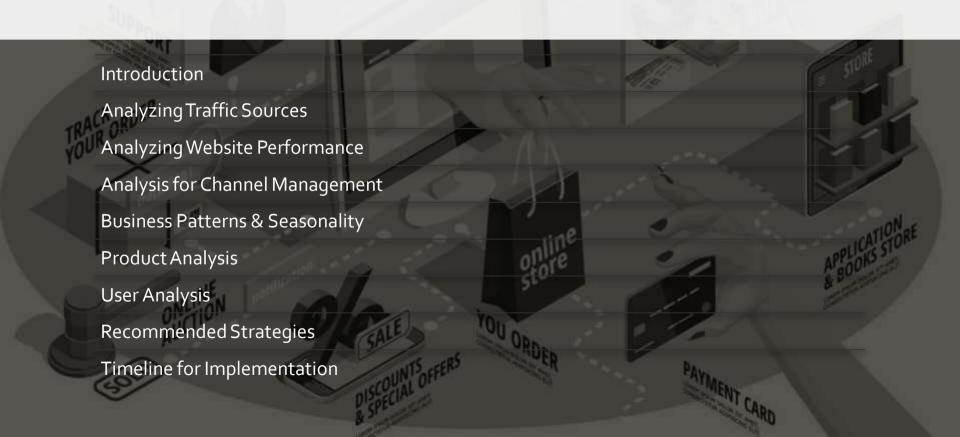# E-COMMERCE ANALYSIS & STRATEGY RECOMMENDATIONS

Created by: Rupsa Chaudhuri

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INTRODUCTION

- **Company Background:** Established in 2012, this e-commerce business specializes in selling stuffed animals directly through their website. They've successfully launched four different stuffed animal dolls, with Mr. Fuzzy emerging as the most popular .

- **Company Objectives:** The company prioritizes a data-driven approach to optimize its online presence. Leveraging website data from 2012-2014, their primary objectives for 2015 include:

  - Enhancing website performance: Improve mobile optimization, conversion funnels, and repeat customer strategy.

  - Increasing website traffic, sales, and revenue: This likely involves attracting new customers while also retaining existing ones.

ANALYSING TRAFFIC SOURCES

- **Gsearch non-brand** is the top traffic driver (247,564 sessions).

- **Brand traffic on gsearch** has a higher conversion rate (7.7%) than non-brand (7.26%) in 2014.

- **Organic search** and **direct search** have good conversion rates at 8.6% and 7.02%.

- **Socialbook traffic** has a low CVR at 5.15%, suggesting a need to bid down.

- **Desktop CVR** (9.18% in 2014) is much higher than **mobile CVR** (3.3%).

utm_source	utm_campaign	http_referer	sessions	orders	session_to_order
gsearch	nonbrand	https://www.gsearch.com	247564	15797	6.3810
bsearch	nonbrand	https://www.bsearch.com	48072	3237	6.7336
			32793	2304	7.0259
		https://www.gsearch.com	28913	2042	7.0626
gsearch	brand	https://www.gsearch.com	27395	2026	7.3955
		https://www.bsearch.com	6706	580	8.6490
bsearch	brand	https://www.bsearch.com	6545	564	8.6173
socialbook	desktop_targeted	https://www.socialbook.com	5590	288	5.1521
socialbook	pilot	https://www.socialbook.com	5095	55	1.0795

Year	gsearch_sessions	bsearch_sessions	organic_search_sessions	direct_search_sessions
2012	47888	8829	2973	2780
2013	79672	16059	8914	8136
2014	147399	29729	23732	21877

Year	nonbrand_conv_rate	brand_conv_rate
2012	3.8286	5.4729
2013	6.4129	7.2094
2014	7.2642	7.7062

Year	desktop_sessions	desktop_orders	mobile_sessions	mobile_orders	desktop_conv_rate	mobile_conv_rate
2012	46575	2363	15899	233	5.0721	1.4659
2013	80186	6401	32596	1036	8.0261	3.1176
2014	153524	14281	77996	2576	9.1033	3.1107

ANALYSING WEBSITE PERFORMANCE

- The **/products** page is the most visited with 222,619 sessions.

- **/lander-2** has high engagement with 131,170 sessions.

- **/lander-1** and **/lander-4** have the highest bounce rates at 53.24% and 51.69%.

- **/lander-2** has a lower bounce rate at 45.17%.

- **Conversion Funnel (Non-branded Google Search Traffic for Mr. Fuzzy):**

- **/lander-2 to /products:** 64.8%

- **/products to Mr. Fuzzy page:** 62.5%

- **Mr. Fuzzy page to cart:** 57.6%

- **Cart to shipping page:** 67.6%

- **Shipping page to billing page:** 73.8%

- **Billing page to order placement:** 67.2%

pageview_url	sessions
/products	222619
/the-original-mr-fuzzy	141247
/lander-2	131170
/home	115357
/cart	79550
/lander-3	67644
/shipping	54011
/lander-1	47574
/billing-2	40006
/lander-5	37543
/thank-you-for-your-...	26893
/the-forever-love-bear	20585
/the-birthday-sugar-...	14769
/lander-4	9385

landing_page	sessions_hitting_this_lander
/lander-2	131170
/home	115357
/lander-3	67644
/lander-1	47574
/lander-5	37543
/lander-4	9385

pageview_url	sessions	bounced_sessions	bounce_percentage
/lander-1	47574	25330	53.2434
/lander-4	9385	4851	51.6889
/lander-3	67644	34227	50.5987
/lander-2	131170	59249	45.1696
/home	115357	48546	42.0833
/lander-5	37543	13851	36.8937

total_sessions	lander_2_ctr	lander_to_product_ctr	product_to_mrfuzzy_ctr	mrfuzzy_to_cart_ctr	cart_to_shipping_ctr	shipping_to_billing_ctr	billing_to_thankyou_ctr
472871	21.3551	64.8056	62.5152	57.6391	67.6088	73.7731	67.2094

ANALYSIS FOR CHANNEL MANAGEMENT

utm_source	utm_campaign	sessions	pct_mobile	pct_desktop
bsearch	brand	6545	13.2315	86.7685
bsearch	nonbrand	48072	13.8293	86.1707
gsearch	brand	27395	40.2847	59.7153
gsearch	nonbrand	247564	31.1277	68.8723

device_type	utm_source	sessions	orders	conv_rate
desktop	bsearch	41424	3031	7.3170
desktop	gsearch	170503	13404	7.8614
mobile	bsearch	6648	206	3.0987
mobile	gsearch	77061	2393	3.1053

search_type	sessions
others	389543
direct_type_in	39917
gsearch_organic	35202
bsearch_organic	8209

yr	nonbrand	brand	brand_pct_of_nonbrand	direct	direct_pct_of_nonbrand	organic	organic_pct_of_nonbrand
2012	53873	2844	5.2791	2780	5.1603	2973	5.5185
2013	87242	8489	9.7304	8136	9.3258	8914	10.2176
2014	154521	22607	14.6304	21877	14.1579	23732	15.3584

- **Traffic Sources and Device Insights:**

- **Traffic Sources:**
  - **GSearch** drives most traffic, significantly more than **BSearch**.
  - Non-brand campaigns dominate traffic for both search engines.
  - **Direct traffic:** 39,917 sessions (not the largest source).
  - **"Others" category:** 389,543 sessions, which includes paid marketing.

- **Device Distribution:**
  - **Desktop** leads in traffic, but **mobile traffic** is also significant.
  - **BSearch** has a higher desktop share compared to **GSearch**.

- **Conversion Rates:**

- **Desktop Conversions:**
  - **GSearch:** 7.86%
  - **BSearch:** 7.32%

- **Mobile Conversions:**
  - **GSearch:** 3.10%
  - **BSearch:** 3.09%

BUSINESS PATTERNS & SEASONALITY

Conversion Rate and Traffic Trends:

- **Conversion Rate (CVR) Decline:**
  - CVR has decreased significantly from 31.3% to 12.9% since launch (2012-2014).

- **Sessions and Orders Increase:**
  - Despite the lower CVR, the number of sessions and orders has increased, indicating that more users are visiting the site.

- **Holiday Season Spike:**
  - There is a notable increase in sessions during the 4th quarter (holiday season).

Traffic Patterns:

- **Weekday Traffic:**
  - Traffic peaks during business hours (8 AM - 5 PM), with a noticeable lunchtime rush (12 PM - 1 PM).
  - Weekdays have higher traffic compared to weekends.
  - Mondays have slightly lower traffic than other weekdays.
  - Fridays might experience slightly higher traffic than other weekdays.

- **Weekend Traffic:**
  - Weekends generally see lower traffic compared to weekdays.

yr	qtr	sessions	orders	cvr
2012	1	1879	60	31.3167
2012	2	11433	347	32.9481
2012	3	16892	684	24.6959
2012	4	32266	1495	21.5826
2013	1	19833	1273	15.5797
2013	2	24745	1718	14.4034
2013	3	27663	1840	15.0342
2013	4	40540	2616	15.4969
2014	1	46779	3069	15.2424
2014	2	53129	3848	13.8069
2014	3	57141	4035	14.1613
2014	4	76373	5908	12.9270

hr	avg_sessions	mon	tue	wed	thu	fri	sat	sun
0	10.1	13.0	9.4	10.5	11.0	12.0	8.4	6.5
1	8.5	11.6	8.6	8.1	8.1	10.0	7.1	5.6
2	7.6	9.8	6.3	7.9	8.9	9.1	5.5	5.3
3	6.8	9.2	6.3	7.5	6.6	7.6	5.2	4.9
4	7.0	8.1	7.6	7.0	7.2	8.7	5.3	4.7
5	7.5	9.9	7.5	8.0	7.6	9.0	5.2	4.8
6	8.7	9.4	8.7	9.9	9.5	12.2	5.5	5.2
7	10.6	13.1	10.9	11.6	12.3	13.5	7.2	5.2
8	15.4	19.4	15.7	17.6	18.8	21.0	7.7	7.4
9	21.9	27.1	22.8	27.7	25.9	30.5	10.5	8.7
10	25.9	32.4	28.7	33.8	30.1	34.0	11.8	10.6
11	26.9	32.7	32.8	34.2	30.4	36.0	11.7	10.1
12	27.1	34.4	31.7	33.7	33.1	33.5	12.8	10.1
13	26.1	32.7	30.5	32.6	31.9	32.3	11.7	10.9
14	26.1	31.8	30.5	32.0	30.4	33.7	13.0	11.2
15	26.4	32.4	30.3	33.8	31.0	34.8	11.0	11.8
16	26.1	30.7	31.7	33.3	30.5	34.3	10.6	11.4
17	23.0	31.6	26.0	28.1	26.9	26.0	9.9	11.7
18	19.0	23.7	22.3	23.2	22.2	22.2	9.0	10.0
19	16.5	21.2	19.4	19.0	18.2	18.9	8.6	10.1
20	15.3	17.8	17.9	19.2	16.1	15.2	8.6	12.3
21	15.0	18.4	16.3	17.1	16.8	13.9	7.8	14.7
22	13.8	16.0	14.7	16.8	14.4	12.2	8.8	13.6
23	12.2	13.4	13.0	12.6	13.0	11.9	8.1	13.3

PRODUCT ANALYSIS

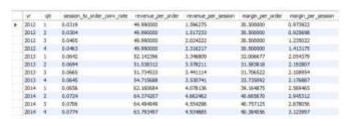**Revenue, Margin, and Conversion Rates:**

- **Growth:** Revenue, margin, and conversion rates have increased consistently from 2012 to 2014.

- **Drivers:** Higher conversion rates and increased traffic have boosted revenue and margin.

- **Performance:** Strong customer acquisition and revenue generation.

Product Funnel Performance:
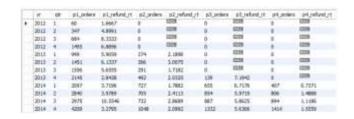
- **Mr. Fuzzy:** High brand awareness, but low click-through rates.

- **Love Bear & Sugar Panda:** Strong click-through rates, indicating effective funnels.

- **Mini Bear:** Low click-through rates, needing funnel optimization.

Refund Rates:

- **Product 1:** Highest refund rate, especially in Q3 of 2012 and 2014. Needs investigation.

- **Product 2 & 4:** Low refund rates, indicating good performance.

- **Product 3:** Initially high refund rates, decreasing over time.

USER ANALYSIS

	repeats	users
▶	0	301979
	1	31076
	2	466
	3	10786

- **Visitor Patterns:**

- **New Visitors:** Majority are new, with significantly fewer third-time visitors compared to second-time and fourth-time visitors.

	avg_diff	min_diff	max_diff
▶	33.8225	1	69

- **Repeat Behavior:** Some revisit immediately; on average, repeat visitors return after a month.

- **Channel Performance:**

	channel_group	new_sessions	repeat_sessions
▶	organic_search	13376	22243
	paid_brand	12463	21477
	direct_type_in	12147	20646
	paid_nonbrand	295636	0
	paid_social	10685	0

- **Top Channels for Repeat Visitors:** Organic search, paid brand, and direct type-in.

- **Lower Repeat Sessions:** Paid non-brand and paid social.

	is_repeat_session	sessions	conv_rate	revenue_per_session
▶	0	344307	0.0637	3.780333
	1	64366	0.0768	4.607075

- **Conversion and Revenue:**

- **Higher Conversion Rates:** Repeat visitors have higher conversion rates and spend more per session.

Avg_CLTV
▶ 1433.90639267229638

- **Customer Lifetime Value (CLTV):** High CLTV of USD 1433.91 per year, indicating strong customer relationships.

RECOMMENDED STRATEGIES

- **Enhanced User Experience:**
- Optimize mobile and desktop experiences for better site performance and navigation.
- Improve landing pages to reduce bounce rates, focusing on key pages like /lander-1 and /lander-4.
- **Conversion Funnel Optimization:**
- Streamline checkout processes and enhance key pages such as /products and Mr. Fuzzy for improved engagement and conversion rates.
- **Data-Driven Marketing:**
- Implement targeted retention strategies to convert new visitors into repeat customers.
- Optimize marketing channels based on performance insights, focusing on desktop traffic and refining social media strategies.
- **Operational Excellence and Investor Appeal:**
- Enhance customer support during peak times to improve user satisfaction.
- Address product quality issues to reduce refund rates and enhance customer experience.
- Showcase financial health and growth potential to attract investors, emphasizing strong revenue growth and customer loyalty metrics.

TIMELINE FOR IMPLEMENTATION

Short Term (0-6 months):

- Optimize UX (mobile/desktop).Improve /lander-1 and /lander-4.Streamline checkout, enhance /products and Mr. Fuzzy. Launch initial retention campaigns. Boost peak-hour support, address high refunds, prepare investor reports.

Mid Term (6-12 months):

- Complete UX optimizations. Redesign /lander-1 and /lander-4.Refine checkout, scale retention, optimize marketing. Establish support protocols, continue quality improvements. Host investor updates on growth.

Long Term (12+ months):

- Maintain UX optimizations. Evolve landing pages. Implement advanced checkout, enhance interactivity. Develop automated retention, explore new marketing. Establish AI-driven support, maintain high standards, sustain investor confidence.

Email:
rupsachaudhuri9@gmail.com

LinkedIn

GitHub

THANK YOU!