2.6   Website Engagement

Having compared performance in terms of consumer perceptions and linguistic content, we next examine the impact of using semi-automated content on firm performance in terms of consumers' engagement with the website (e.g., Bronnenberg et al 2016, Jerath et al 2014, Edelman and Zhenyu 2016). We collect website traffic data for 412 days after the experimental content was posted. During this time, the content received 254 page views from 122 unique website visits arising from organic search results. In addition to the findings discussed in the manuscript that indicate improved performance of semi-automated content relative to human-generated content on a number of dimensions (details are reported in Table W2.6.1), we also find that the semi-automated content results in longer visits per visited page ($\chi^2(3)=167.15$, $p<.000$), suggesting better content performance (Danaher et al. 2006).

Table W2.6.1: User Behavior (Organic Search Source Only)

Dimension	Descriptives ($\sum$)				One-Sample Chi-Squared[1]		
	Revised Machine	Real SEO Experts	Quasi Experts	Novices	χ^2	*df*	*p*
No. of Pages with Pageviews	16	3	5	10	11.88	3	.007**
No. of Pages with Pageviews in %	84.21	33.33	26.32	52.63	40.98	3	.000**
Pageviews	172	16	18	48	257.31	3	.000**
Unique Pageviews	84	6	9	23	130.52	3	.000**
Entrances	76	6	9	21	114.21	3	.000**
Exit Rate (means)	.41	.28	.32	.36	-	-	-
Bounce Rate	.00	.00	.00	.00	-	-	-
Avg. Usage Duration (Abs., sums)	3671	262	455	473	6639.40	3	.000**
Avg. Usage Duration (Rel.)[2]	229	87	91	47	167.15	3	.000**
Returning Visitors (Abs.)	88	10	9	25	127.09	3	.000**
Returning Visitors (Rel.)[2]	5.50	3.33	1.80	2.50	-	-	-
Buying Affinity (Abs.)[3]	4097	276	429	983	6670.60	3	.000**
Buying Affinity (Rel.)[2,4]	256	92	86	98	152.43	3	.000**
Exp. Sales (for U.P.*100)[5]	168	12	18	46	151.30	3	.000**

[1]Statistical significance codes: *0.05 level, **0.01 level;
[2](Rel.) = the absolute value (Abs.) divided by No_of_Pages_with_Pageviews
[3]Buying Affinity (Abs.) = Unique_Pageviews*Willingness_to_Buy (survey measured);
[4]Buying Affinity (Rel.) = Buying_Affnity (Abs.)/No._of_Pages_with_Pageviews;
[5]Exp. Sales (for U.P.*100) = (Unique_Pageviews/100*Expected_Sales_Rate)*100, where the expected sales rate is 2% (obtained from past company reports);

Table W2.6.2 reports statistics for the user behavior for visitors coming from direct links

(e.g., links in emails, on other webpages, etc.) to the focal experimental pages on the website.

Table W2.6.2: User Behavior (Direct Links Source Only)

Dimension	Descriptives ($\sum$)				One-Sample Chi-Squared[1]		
	Revised Machine	Real SEO Experts	Quasi Experts	Novices	χ^2	*df*	*p*
No. of Pages with Pageviews	19	9	19	19	-	-	-
No. of Pages with Pageviews in %	100	100	100	100	-	-	-
Pageviews	545	126	257	515	342.65	3	.000**
Unique Pageviews	270	65	131	257	164.05	3	.000**
Entrances	226	47	95	222	166.57	3	.000**
Exit Rate (means)	.35	.35	.35	.35	-	-	-
Bounce Rate	.04	.07	.04	.04	-	-	-
Avg. Usage Duration (Abs., sums)	705	189	536	317	361.40	3	.000**
Avg. Usage Duration (Rel.)[2]	37	21	28	17	8.96	3	.029*
Returning Visitors (Abs.)	275	61	126	258	178.81	3	.000**
Returning Visitors (Rel.)[2]	14.47	6.77	6.63	13.57	-	-	-
Buying Affinity (Abs.)[3]	10021	3041	5846	12760	7066.10	3	.000**
Buying Affinity (Rel.)[2,4]	418	338	308	638	156.99	3	.000**
Exp. Sales (for U.P.*100)[5]	540	130	262	514	328.11	3	.000**

[1]Statistical significance codes: *0.05 level, **0.01 level;
[2](Rel.) = the absolute value (Abs.) divided by No_of_Pages_with_Pageviews
[3]Buying Affinity (Abs.) = Unique_Pageviews*Willingness_to_Buy (survey measured);
[4]Buying Affinity (Rel.) = Buying_Affnity (Abs.)/No._of_Pages_with_Pageviews;
[5]Exp. Sales (for U.P.*100) = (Unique_Pageviews/100*Expected_Sales_Rate)*100, where the expected sales rate is 2% (obtained from past company reports);

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