

### 2.3.4 Additional Keywords Performance

In this section, we assess the content machine’s performance for additional keywords in the IT service sector experiment, which were not included in our original study, bringing the keyword count for all experimental groups to 30 keywords. Due to technical issues with the company’s website that were beyond our control, we were unable to put the generated content online to evaluate search engine rankings. Nonetheless, we report the quality scores for the machine and human made content.

Table W2.3.4 depicts the additional keywords for which content was generated. Consistent with our previously reported findings, Table W2.3.5 illustrates that the raw and revised machine content substantially outperforms all competing human content producing groups including the SEO experts, similar to the results depicted in Table W2.3.1.

Table W2.3.4: Additional Keywords for the IT Service Field Experiment

Field Study	Keyword	Descriptives			
		Avg. monthly search volume	Competition	Competition index	Keyword length
IT service	SLA contract	10	low	0	2
	SLA ITIL	10	low	14	2
	service level agreement best practices	10	low	0	5
	IT security services	10	-	-	3
	ITIL incident	20	low	11	2
	ITIL ITSM	10	low	32	2
	IT maintenance contract	10	-	-	3
	IT project management	40	low	18	3
	IT scalability	10	low	0	2
	IT performance management	10	low	26	3
	Server maintenance	20	low	0	2

Entries that display “-“ mean that the search engine keyword tool did not provide specific information.

Table W2.3.5: Quality Score Components Group Comparisons to Top 10 Ranked Websites (Keyword Count Increased to 30 Keywords)

Quality Score Component	Group	Descriptives				Wilcoxon rank sum <sup>1</sup>			
		Median (IQR)		Min	Max	W	z	r	p
<b>Topic</b> ( <i>s<sub>a</sub></i> )	<b>Top 10</b>	<b>.38</b>	<b>(.23)</b>	<b>.21</b>	<b>.69</b>				
	Revised machine	.49	(.22)	.35	.71	253	2.91	.38	.004**
	Raw Machine	.50	(.19)	.28	.77	260	2.84	.37	.004**
	Real SEO Experts	.40	(.19)	.30	.72	302	2.01	.26	.043*
	Ouasi Experts	.41	(.19)	.10	.68	381	.81	.10	.420
	Novices	.33	(.16)	.17	.64	490	-1.08	-.14	.281
	Worst 10	.18	(.07)	.09	.28	870	-7.23	-.93	.000**
<b>Keywords</b> ( <i>s<sub>k</sub></i> )	<b>Top 10</b>	<b>.38</b>	<b>(.26)</b>	<b>.14</b>	<b>.77</b>				
	Revised machine	.52	(.28)	.32	.81	250	2.95	.38	.003**
	Raw Machine	.55	(.23)	.29	.85	260	2.84	.37	.004**
	Real SEO Experts	.46	(.21)	.16	.79	318	1.77	.23	.077
	Ouasi Experts	.43	(.21)	.01	.77	382	.79	.10	.429
	Novices	.33	(.25)	.05	.72	498	-1.20	-.16	.230
	Worst 10	.15	(.10)	.03	.26	853	-6.77	-.87	.000**
<b>Uniqueness</b> ( <i>s<sub>d</sub></i> )	<b>Top 10</b>	<b>.92</b>	<b>(.09)</b>	<b>.72</b>	<b>.99</b>				
	Revised Machine	.91	(.13)	.74	1.00	418	.47	.09	.641
	Raw Machine	.81	(.12)	.52	.97	694	-3.70	-.48	.000**
	Real SEO Experts	.97	(.06)	.68	1.00	203	3.51	.46	.000**
	Ouasi Experts	.99	(.03)	.87	1.00	101	5.07	.66	.000**
	Novices	.99	(.04)	.79	1.00	161	4.02	.53	.000**
	Worst 10	.94	(.05)	.85	.99	323	1.87	.24	.061
<b>Readability similarity</b> ( <i>s<sub>r</sub></i> )	<b>Top 10</b>	<b>.56</b>	<b>(.08)</b>	<b>.48</b>	<b>.74</b>				
	Revised Machine	.82	(.19)	.26	1.00	104	5.11	.66	.000**
	Raw Machine	.95	(.14)	.70	1.00	6	6.57	.85	.000**
	Real SEO Experts	.70	(.53)	.02	1.00	343	1.39	.18	.165
	Ouasi Experts	.49	(.43)	.04	1.00	520	-1.28	-.17	.200
	Novices	.53	(.45)	.02	.96	497	-1.19	-.16	.234
	Worst 10	.43	(.17)	.12	.68	827.5	-5.57	-.72	.000**
<b>Naturalness similarity</b> ( <i>s<sub>n</sub></i> )	<b>Top 10</b>	<b>.56</b>	<b>(.06)</b>	<b>.50</b>	<b>.65</b>				
	Revised Machine	.67	(.40)	.17	1.00	384	.97	.13	.332
	Raw Machine	.75	(.42)	.33	1.00	227.5	3.29	.43	.000**
	Real SEO Experts	.67	(.33)	.08	1.00	346.5	1.34	.17	.181
	Ouasi Experts	.50	(.33)	.17	.83	448.5	-.20	-.03	.843
	Novices	.54	(.44)	.00	1.00	453.5	-.51	-.07	.607
	Worst 10	.30	(.15)	.08	.53	896	-6.59	-.85	.000**

<sup>1</sup>Two-tailed tests; statistical significance codes: \*0.05 level, \*\*0.01 level;

## Appendix References

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