MIS7420

Seminar in Management Information Systems: Paper Replication with R

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1   Data Cleaning Process

1.1   BOBO1

This is a reference test. Hlavac (2015) is used to generate many summary tables in this report.

2   Paper Replication

In this section, we provide our replication for this paper.

2.1   Table 1

Table 1 shows the summary statistics of top five vendors by sales volume.

Table 1: Summary Statistics of Top Five Vendors by Sales Volume

DomainName	TotalTransaction	TotalSales	TotalPagesViewed	PagesPerDollar	TotalDuration	MinsPerDollar
dell.com	1, 473	428, 412.500	61, 230	0.143	51, 909.190	0.121
amazon.com	9, 973	316, 678.400	422, 284	1.333	333, 198.200	1.052
staples.com	5, 663	225, 993.100	235, 965	1.044	156, 993.000	0.695
walmart.com	1, 838	147, 445.300	75, 081	0.509	62, 879.170	0.426
bestbuy.com	1, 159	142, 993.700	47, 809	0.334	34, 807.600	0.243

2.2   Table 2

Table 2: Summary Statistics of Referring Domain Categories

Domain Name	Total Transaction	Referred by SearchEngine	Direct to Website	Referred by Others
amazon.com	10, 904	2, 955(27.1%)	7, 018(64.4%)	931(8.6%)
bestbuy.com	1, 230	258(21.0%)	901(73.3%)	71(5.8%)
All Others	36, 794	6, 999(19.0%)	25, 483(69.3%)	4, 312(11.7%)
All Transactions	48, 928	10, 212(20.9%)	33, 402(68.3%)	5, 314(10.9%)

3   Advanced Method

3.1   Synthetic Control Method

3.2   Generalized Synthetic Control Method

3.3   Heckit Approach

3.4   PSM and LA-PSM

3.5   Measurement Error Bias Correction

4   References

[1] Marek Hlavac. Stargazer: Well-formatted regression and summary statistics tables. *R package version*, 5(1), 2015.