

EXHIBIT D

Summary of Relevant Variability in Share Object Functionality

	Sept 2009 – Aug. 16, 2010	Aug. 16, 2010 – Present
Created a URL Preview from a URL shared in a message from the “ Share ” plugin	Variable	Variable
Created a share object from a URL shared in a message from the “ Share ” plugin	Variable	Variable
Created a URL Preview from a URL shared in a message from the Facebook website	No	Variable
Created a share object from a URL shared in a message from the Facebook website	No	Variable
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No
Displayed a URL share in a message in an identifiable way	No	No

**Class Period
Dec. 30, 2011 - Present**

Summary of Relevant Variability in Internal Global Object Share Count Functionality

	Sept 2009 – Aug. 16, 2010	Aug. 16, 2010 – Present
Created a URL Preview from a URL shared in a message from the “Share” plugin	Variable	Variable
Created a share object from a URL shared in a message from the “Share” plugin	Variable	Variable
A URL shared in a message from the “Share” plugin incremented the internal share_count in the global share object	Variable	Variable
Created a URL Preview from a URL shared in a message from the Facebook website	No	Variable
Created a share object from a URL shared in a message from the Facebook website	No	Variable
A URL shared in a message from the Facebook website incremented the internal share_count in global share object	No	Variable
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No
A URL shared in a message from the Facebook mobile Messenger application incremented the internal global share object	No	No
Displayed a URL share in a message in an identifiable way	No	No

Class Period
Dec. 30, 2011 - Present

Summary of Relevant Variability in Social Plugin Counter Functionality

	Sept 2009 – April 2010	April 2010 – Aug. 16, 2010	Aug. 16, 2010 – Dec. 19, 2012	Dec. 19, 2012 – Present
Created a URL Preview from a URL shared in a message from the “Share” plugin	Variable	Variable	Variable	Variable
Created a share object from a URL shared in a message from the “Share” plugin	Variable	Variable	Variable	Variable
A URL shared in a message from the “Share” plugin incremented the share_count in the global share object	Variable	Variable	Variable	Variable
A URL shared in a message from the “Share” plugin incremented a Social Plugin Counter	No	Variable	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook website	No	No	Variable	Variable
Created a share object from a URL shared in a message from the Facebook website	No	No	Variable	Variable
A URL shared in a message from the Facebook website incremented the share_count in global share object	No	No	Variable	Variable
A URL shared in a message from the Facebook website incremented a Social Plugin Counter	No	No	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No	No	No
A URL shared in a message from the Facebook mobile Messenger application incremented the global share object	No	No	No	No
A URL shared in a message from the Facebook mobile Messenger application incremented a Social Plugin Counter	No	No	No	No
Displayed a URL share in a message in an identifiable way	No	No	No	No

Class Period
Dec. 30, 2011 - Present

Summary of Relevant Variability in Internal [REDACTED] Hive Table Functionality

	Sept 2009 – Aug. 16, 2010	Aug. 16, 2010 – Mid 2011	Feb. 21, 2011 – Present
Created a URL Preview from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable
Created a share object from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable
A URL shared in a message from the “ Share ” plugin was logged in the internal [REDACTED] Hive table	Variable	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook website	No	Variable	Variable
Created a share object from a URL shared in a message from the Facebook website	No	Variable	Variable
A URL shared in a message from the Facebook website was logged in the internal [REDACTED] Hive table	No	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No	No
A URL shared in a message from the Facebook mobile Messenger application was logged in the internal [REDACTED] Hive table	No	No	No
Displayed a URL share in a message in an identifiable way	No	No	No

(Pre-class) period discussed by Dr. Jennifer Golbeck in her report

**Class Period
Dec. 30, 2011 - Present**

Summary of Relevant Variability in Nectar Logging of Share Scrapes

	June 13, 2011 – June 20, 2012	June 20, 2012 – Present
Created a URL Preview from a URL shared in a message from the “Share” plugin or from the Facebook website	Variable	Variable
Scraped a third-party website in connection with attempting to create a URL Preview from a URL shared in a message from the “Share” plugin or from the Facebook website	Variable	Variable
Logged the scrape of a third-party website to Nectar in connection with attempting to create a URL Preview from a URL shared in a message from the “Share” plugin or from the Facebook website	Variable (1%)	Variable (0.01%)
Logged the scrape of a third-party website to Nectar in connection with attempting to create a URL Preview from a URL shared in a message from the “Share” plugin or from the Facebook website, for a URL with a URL-specific sampling rate	Variable (URL specific)	Variable (URL specific)
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No
Scraped a third-party website in connection with attempting to create a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No
Logged the scrape of a third-party website to Nectar in connection with attempting to create a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No
Logged the scrape of a third-party website to Nectar in connection with attempting to create a URL Preview from a URL shared in a message from the Facebook mobile Messenger application, for a URL with a URL-specific sampling rate	No	No
Displayed a URL shared only in a message in an identifiable way	No	No

**Class Period
Dec. 30, 2011 - Present**

Summary of Relevant Variability in External Insights Functionality

	April 2010 – Aug. 16, 2010	Aug. 16, 2010 – Oct. 11, 2012	Oct. 11, 2012 – Present
Created a URL Preview from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable
Created a share object from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable
A URL shared in a message from the “ Share ” plugin incremented the internal Insights counters	Variable	Variable	No
Data including a URL shared in a message from the “ Share ” plugin was viewed in Insights	Variable	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook website	No	Variable	Variable
Created a share object from a URL shared in a message from the Facebook website	No	Variable	Variable
A URL shared in a message from the Facebook website incremented the internal Insights counters	No	Variable	No
Data including a URL shared in a message from the Facebook website was viewed in Insights	No	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No	No
A URL shared in a message from the Facebook mobile Messenger application incremented the internal Insights counter	No	No	No
Data including a URL shared in a message from the Facebook mobile Messenger application was viewed in Insights	No	No	No
Displayed a URL share in a message in an identifiable way	No	No	No

**Class Period
Dec. 30, 2011 - Present**

Summary of Relevant Variability in External “Link Stats” and Graph API Functionality

	Sept 2009 – April 2010	April 2010 – Aug. 16, 2010	Aug. 16, 2010 – Dec. 19, 2012	Dec. 19, 2012 – Present
Created a URL Preview from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable	Variable
Created a share object from a URL shared in a message from the “ Share ” plugin	Variable	Variable	Variable	Variable
A URL shared in a message from the “ Share ” plugin incremented the internal share_count in the global share object and ██████████ FQL table	Variable	Variable	Variable	Variable
Data including a URL shared in a message from the “ Share ” plugin was viewed in the external share_count* in “ link_stats ” or Graph API	No	Variable	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook website	No	No	Variable	Variable
Created a share object from a URL shared in a message from the Facebook website	No	No	Variable	Variable
A URL shared in a message from the Facebook website incremented the internal share_count in global share object and ██████████ FQL table	No	No	Variable	Variable
Data including a URL shared in a message from the Facebook website was viewed in the external share_count* in “ link_stats ” or Graph API	No	No	Variable	No
Created a URL Preview from a URL shared in a message from the Facebook mobile Messenger application	No	No	No	No
Created a share object from a URL shared in a message from the Facebook mobile Messenger application	No	No	No	No
A URL shared in a message from the Facebook mobile Messenger application incremented the internal global share object and ██████████ FQL table	No	No	No	No
Data including a URL shared in a message from the Facebook mobile Messenger application was viewed in the external share_count* in “ link_stats ” or Graph API	No	No	No	No
Displayed a URL share in a message in an identifiable way	No	No	No	No

*The external “share_count” is an aggregate of URL shares in Facebook messages and Facebook posts.

Class Period
Dec. 30, 2011 - Present