Monarch Money Data Take Home Josh Erickson | Jan 23, 2025 **Terminology** • institution: the bank the user is linking (e.g. Chase, Wells Fargo) • provider: the data aggregator used to link the institution to Monarch (e.g. Plaid) • source: the platform where the user initiates the link to their institution (e.g. web, mobile) • connection created: user links their institution via provider to Monarch. Unique at the institution x data provider level • successful connection: a link between Monarch and the institution that is connected for >= 24hrs without disconnection • First Connection Success Rate: total # successful connections / connections created • Quick Disconnect: connections that become disconnected within 24hrs of creation **Summary Stats** Successful Connections First Connection Success (FCS) **Connections Created** INSTITUTION X PROVIDER PAIR 49,386 93% 46,171 Connections per User Users Users CREATED CONNECTION SUCCESSFUL CONNECTION SUCCESSFUL ONLY 29,077 28,039 1.6 Average User FCS Users w/Quick Disconnect % Users w/Quick Disconnect 94% 9.6% 2,790 August 2024 Top Level Metrics 55,000 connections 49,386 50,000 successful_connections 46,171 45,000 successful_connection... 40,000 quick_disconnect_users 35,000 29,077 30,000 28,039 25,000 20,000 15,000 10,000 5,000 2,790 August 2024 # Users Creating Successful Connections & Avg Successul Connections per User 1,200 1.5 1.6 1,000 1.4 800 600 400 200 0.2 0.0 0 2024-07-31 date connections per user **Provider Share of Total Connections** provider finicity mx plaid First Connection Success Rate (FCS) Successful Connections **Connections Created** First Connection Success 46,171 49,386 93% Users w/ 0 FCS UNABLE TO CREATE SUCCESSFUL CONNECTION 1,038 First Connection Success 98% 96% 96% 94% 94% 84% Aug 3 2024 Aug 6 2024 Aug 9 2024 Aug 12 2024 Aug 15 2024 Aug 18 2024 Aug 30 2024 Jul 31 2024 Aug 21 2024 Aug 24 2024 Aug 27 2024 First Connection Success Quartiles ▼ avg_fcs institutions quartile 4 100% 22 3 100% 22 2 95% 23 1 79% 23 Page 1 of 1 → >> Showing rows 1-4 of 4 FCS by Source First Connection Success by Source Connections by Source mobile (ios + android) vs web 35,000 100% 95% 92% 90% 30,000 27,196 80% % first connection success 70% 22,190 20,000 15,000 60% 50% 40% 30% 10,000 20% 5,000 10% 0% mobile web mobile web source source First Connection Success by Source mobile (ios + android) vs web 100% source mobile 98% web 96% % first connection success 94% 92% 90% 88% 86% 84% 82% Jul 31 2024 Aug 3 2024 Aug 6 2024 Aug 9 2024 Aug 12 2024 Aug 15 2024 Aug 18 2024 Aug 21 2024 Aug 24 2024 Aug 27 2024 Aug 30 2024 date FCS by Data Provider First Connection Success by Provider 96% plaid 94% finicity 90% mx 0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100% % first connection success First Connection Success by Provider plaid vs finicity vs mx provider 100% finicity 95% mx 90% plaid 85% % first connection 80% 75% 70% 65% 60% 55% Jul 31 2024 Aug 18 2024 Aug 24 2024 Aug 3 2024 Aug 6 2024 Aug 9 2024 Aug 12 2024 Aug 15 2024 Aug 21 2024 Aug 27 2024 Aug 30 2024 date **FCS** by Institution Top 10 Institutions by User Count fcs institution_name pct_users users Aurora Capital Group 2,066 100% 5% 1,717 99% 4% Evergreen National Bank Summit Valley Financial 1,500 100% 3% Windcrest Bank 1,453 100% 3% White Oak Bank 1,339 100% 3% Peakstone Bank 1,318 84% 3% **Edgewood Financial** 1,312 97% 3% Noble Crest Bank 1,288 100% 3% Pathfinder Financial 1,230 99% 3% 1,162 100% Landmark National Bank 3% Showing rows 1-10 of 10 Page 1 First Connection Success by Institution w/ Multiple Providers filtered to only institution x provider pairs with >= 100 connections 110% provider 100% 100% 100% 100% 99% finicity 100% 97% 97% 96% 93% 87% 90% 85% 82% plaid % first connection success 80% 70% 64% 60% 50% 40% 30% 20% 10% 0% Harmony Financial Services Edgewood Financial North Point Savings Elmwood Credit Union Infinite Trust Co. Harborstone Financial Peakstone Bank Apex Trust institution First Connection Success by Institution aggregate across providers and sources 100% 81% 86% 87% 85% 84% 82% % first connection succes 80% Provider Share of Bottom 10 FCS Institutions provider 9% finicity mx 27% plaid Provider Distribution for Bottom 10 Institutions by FCS filtered to only institution x provider pairs with >= 100 connections provider 90% 80% 79% finicity 78% 80% 76% 74% mx 70% 64% plaid 59% 60% 54% 50% 40% % first 20% 10% 0% Desert Bloom Credit Jetstream Savings & Redwood Savings & Edgewood Financial Quantum Savings Oakridge Bank Blue Horizon Bank Grandview National Tranquility National Zephyr Financial institution **Quick Disconnections** % Users Retry Users w/Quick Disconnect Users Retry After Quick Disconnect AFTER QUICK DISCONNECT 2,790 959 34% User Retry % after Quick Disconnect 45% source mobile 40% 37% web 35% AGG(% retry) 15% 10% 5% 0% mobile web source Provider Share of Quick Disconnections provider finicity 24% plaid 49% Days between Quick Disconnect and Retry Hours between Quick Disconnect and Retry 50% 70% 60% 40% 35% 33% 50% 30% × 25%

Ignored Disconnected Events

W/ NO CREATED EVENT

133,801

20%15%

10%

5% 0%

a) 0

13%

c) 2-12

hours between quick disconnect and retry

4%

b) 1

7%

d) 13-24

% Disconnected Events to Ignore

88%

e) > 24

Total Disconnected Events

152,168

30%

20%

10%

Data Validation

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28

days between quick disconnect and retry

• Are there any events within a given table that are missing values for the field `type`?