

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/ng6xgki2.json

Modeling 18 apps covering ~95.1% of DAU

Resuming; skipping 15 completed apps...

[Quora] skip (done).

[Reddit] skip (done).

[Snapchat] skip (done).

[WhatsApp] skip (done).

[Pinterest] skip (done).

[LinkedIn] skip (done).

[WeChat] skip (done).

[X (formerly Twitter)] skip (done).

[Telegram] skip (done).

[TikTok] skip (done).

[Threads] skip (done).

[Facebook] skip (done).

[Instagram] skip (done).

[YouTube] skip (done).

[Twitter] skip (done).

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/j5juw6w4.json

DEBUG:cmdstanpy:idx 0

DEBUG:cmdstanpy:running CmdStan, num\_threads: None

DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.12/dist-packages/prophet/stan\_model/prophet\_model.bin', 'random', 'seed=2128', 'data', 'file=/tmp/tmp1qan339/ng6xgki2.json', 'init=/tmp/tmp1qan339/j5juw6w4.json', 'output', 'file=/tmp/tmp1qan339/prophet\_model\_3po6w71/prophet\_model-20251025075027.csv', 'method=optimize', 'algorithm=lbfgs', 'iter=10000']


07:50:27 - cmdstanpy - INFO - Chain [1] start processing

INFO:cmdstanpy:Chain [1] start processing

07:50:31 - cmdstanpy - INFO - Chain [1] done processing

INFO:cmdstanpy:Chain [1] done processing

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/a9idvnte.json

[Programming Courses app]  saved |  $\alpha=1.00$  | model=ElasticNetCV, ENet  $\alpha=0.007223$ ,  
ll\_ratio=0.95

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/v3c9uqd4.json

DEBUG:cmdstanpy:idx 0

DEBUG:cmdstanpy:running CmdStan, num\_threads: None

DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.12/dist-packages/prophet/stan\_model/prophet\_model.bin', 'random', 'seed=89201', 'data',  
'file=/tmp/tmp1qan339/a9idvnte.json', 'init=/tmp/tmp1qan339/v3c9uqd4.json', 'output',  
'file=/tmp/tmp1qan339/prophet\_modello8eod9j/prophet\_model-20251025075102.csv',  
'method=optimize', 'algorithm=lbfgs', 'iter=10000']

07:51:02 - cmdstanpy - INFO - Chain [1] start processing

INFO:cmdstanpy:Chain [1] start processing

07:51:06 - cmdstanpy - INFO - Chain [1] done processing

INFO:cmdstanpy:Chain [1] done processing

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/ak4k8l7k.json

DEBUG:cmdstanpy:input tempfile: /tmp/tmp1qan339/q2eqklro.json


DEBUG:cmdstanpy:idx 0

DEBUG:cmdstanpy:running CmdStan, num\_threads: None

DEBUG:cmdstanpy:CmdStan args: ['/usr/local/lib/python3.12/dist-packages/prophet/stan\_model/prophet\_model.bin', 'random', 'seed=86696', 'data',  
'file=/tmp/tmp1qan339/ak4k8l7k.json', 'init=/tmp/tmp1qan339/q2eqklro.json', 'output',  
'file=/tmp/tmp1qan339/prophet\_model\_pfz44g5/prophet\_model-20251025075120.csv',  
'method=optimize', 'algorithm=lbfgs', 'iter=10000']

07:51:20 - cmdstanpy - INFO - Chain [1] start processing

INFO:cmdstanpy:Chain [1] start processing

[Science Courses app]  saved |  $\alpha=0.25$  | model=ElasticNetCV, ENet  $\alpha=0.007084$ ,  
ll\_ratio=0.95

07:51:22 - cmdstanpy - INFO - Chain [1] done processing

INFO:cmdstanpy:Chain [1] done processing

[Health Courses app] ☒ saved |  $\alpha=0.75$  | model=ElasticNetCV, ENet  $\alpha=0.167$ ,  $l1\_ratio=0.80$

(Checkpointed) AGG HOLDOUT (28d) — MAE: 1792.44 | RMSE: 3292.89 | MAPE: 18.68% |  
Acc: 81.32%

Prophet-only AGG MAPE: 19.89% →  $\Delta$ MAPE vs Hybrid: +1.21 pts

(After aggregate calibration) — MAE: 1829.61 | RMSE: 3365.73 | MAPE: 18.89% | Acc:  
81.11% |  $c=0.992$

