

DWH Project

Done By:

Mohamed Adel

Marwa Mahmoud

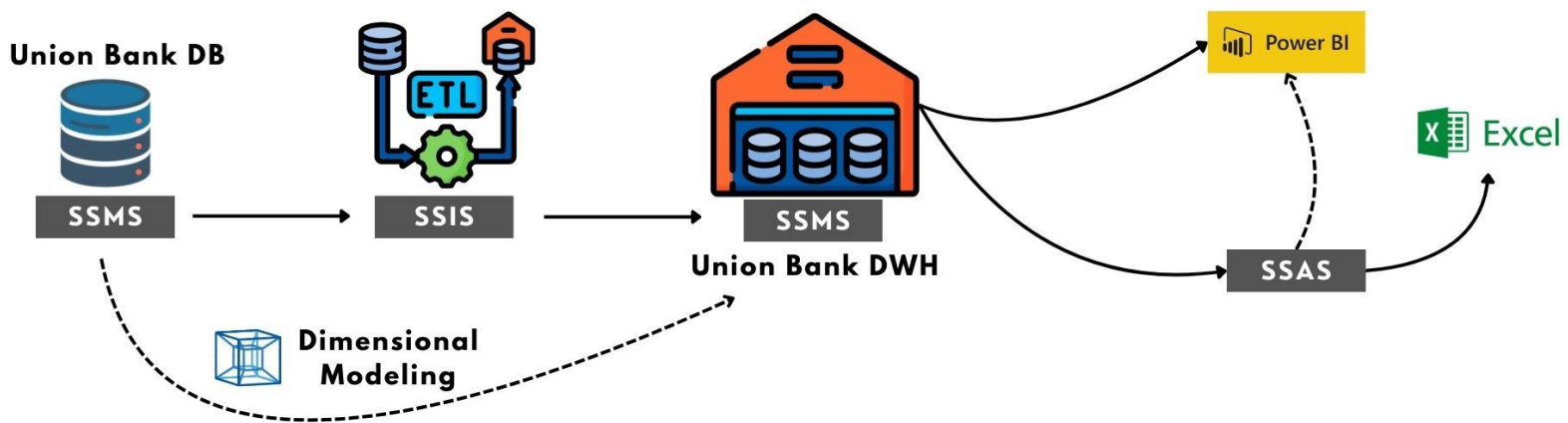
Marwa Sallam

Abdelrahman El-Kholy

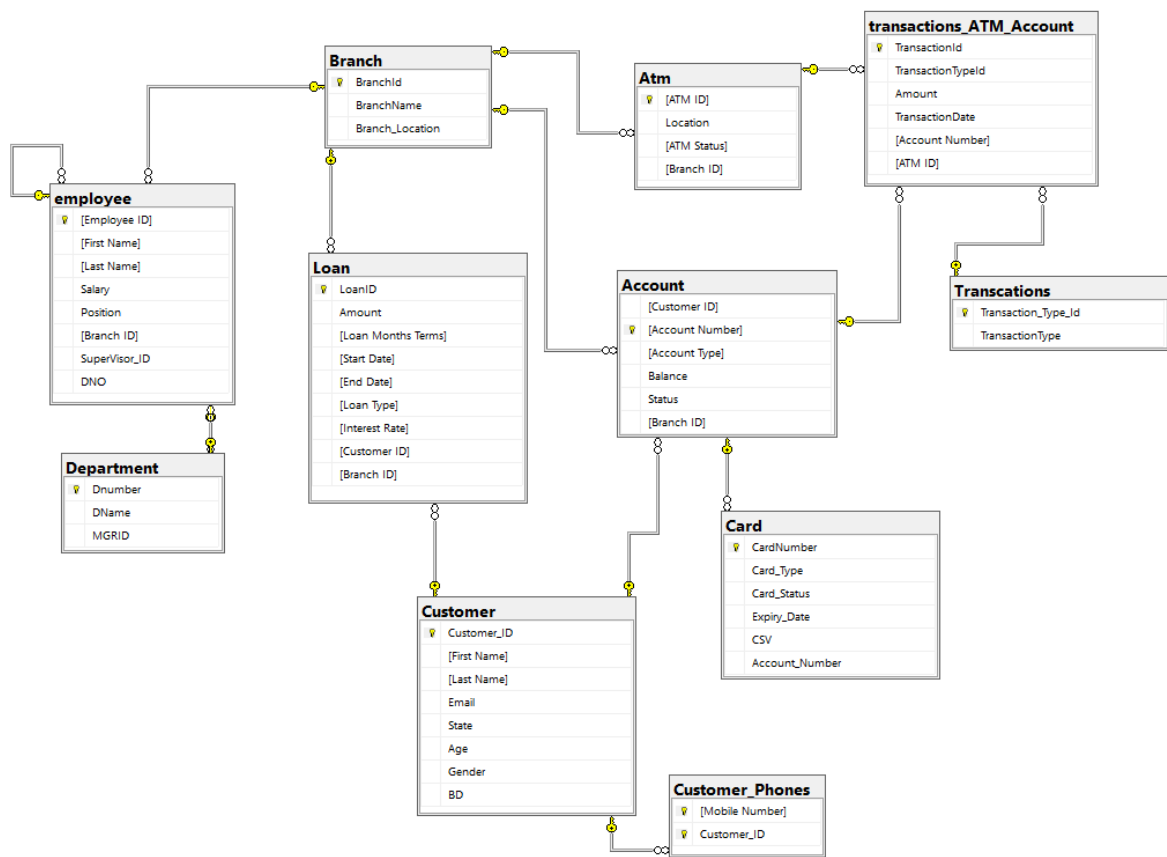
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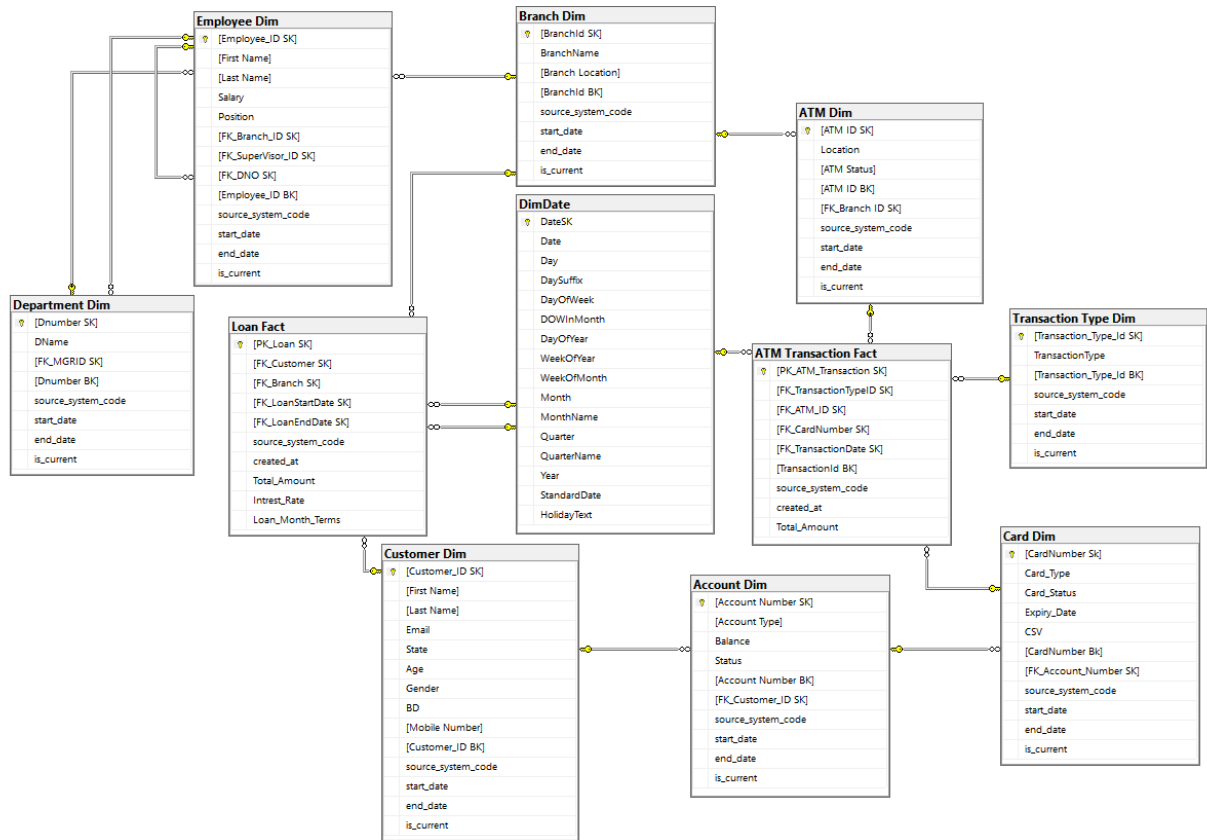
0. System Architecture



1. Relational DB Diagram



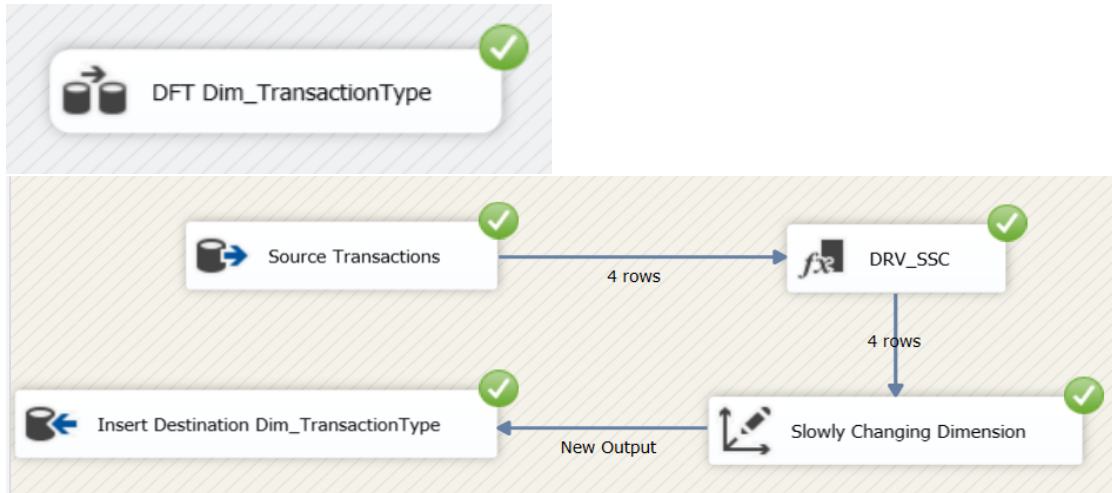
2. DWH Diagram



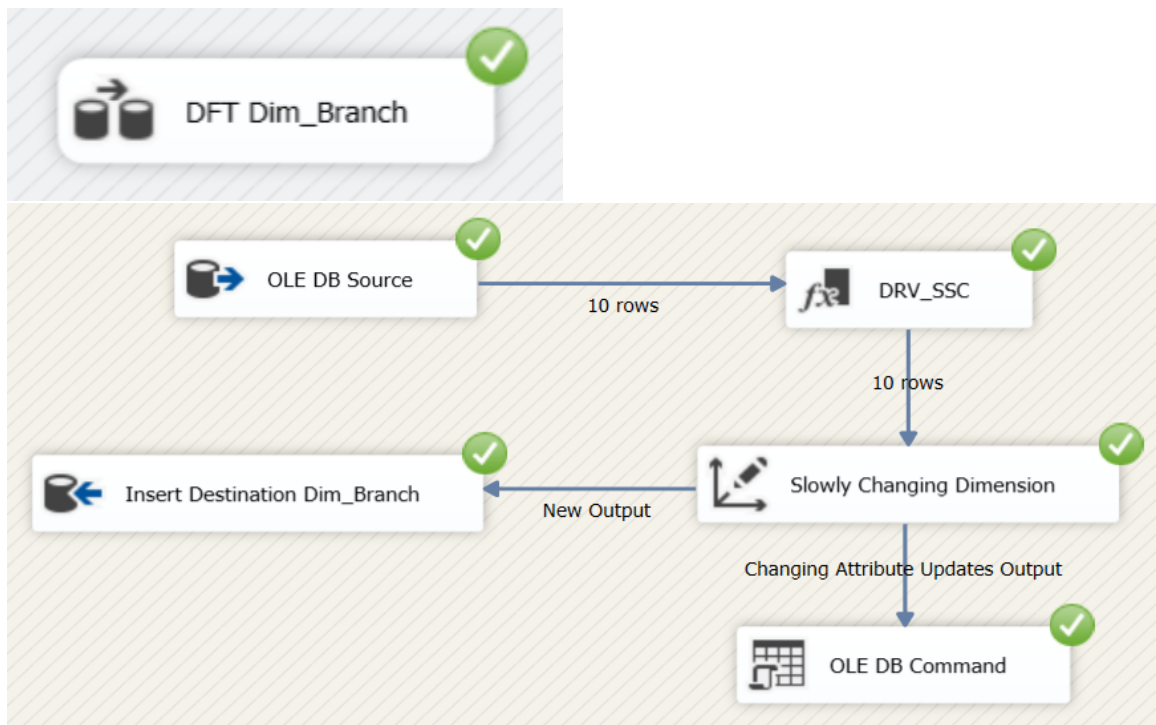
3. SSIS

3.1. Dimension Tables

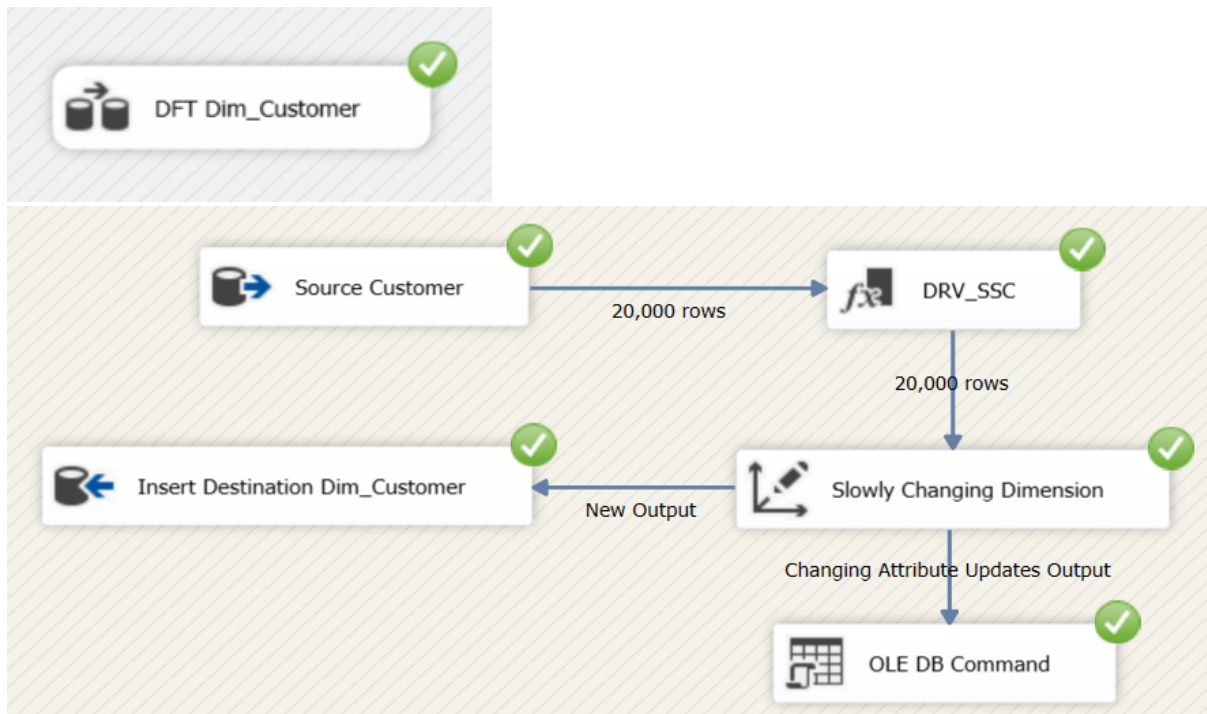
3.1.1. Transaction Type Dimension



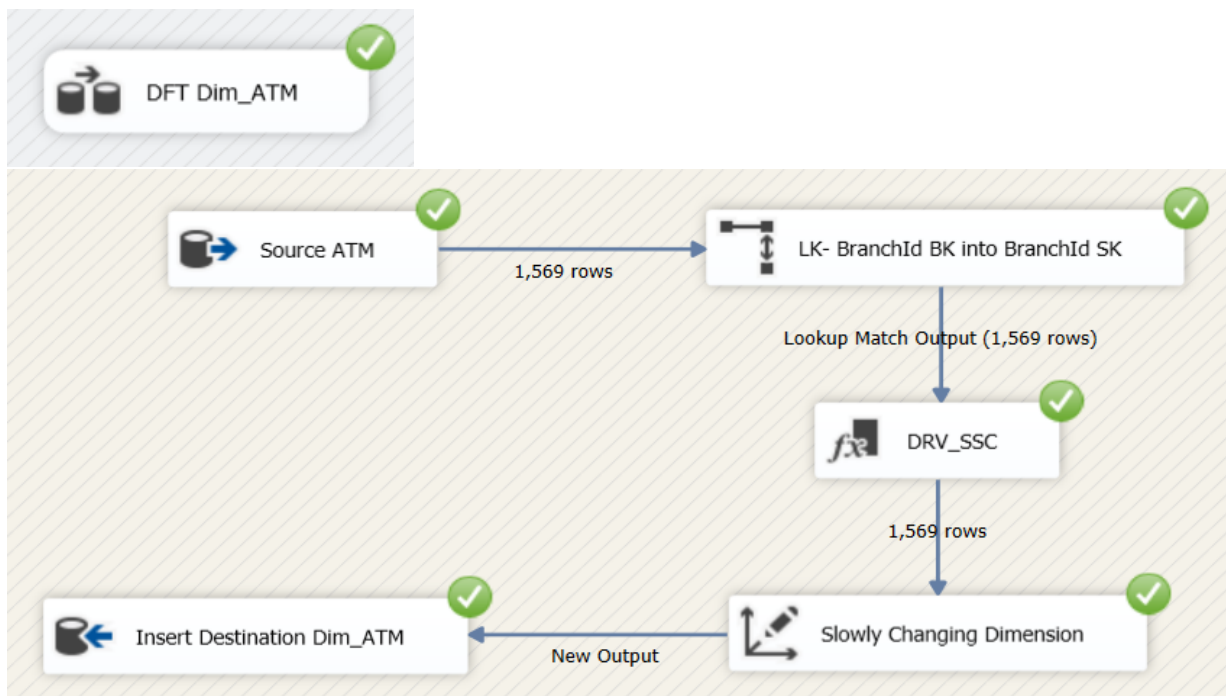
3.1.2. Branch Dimension



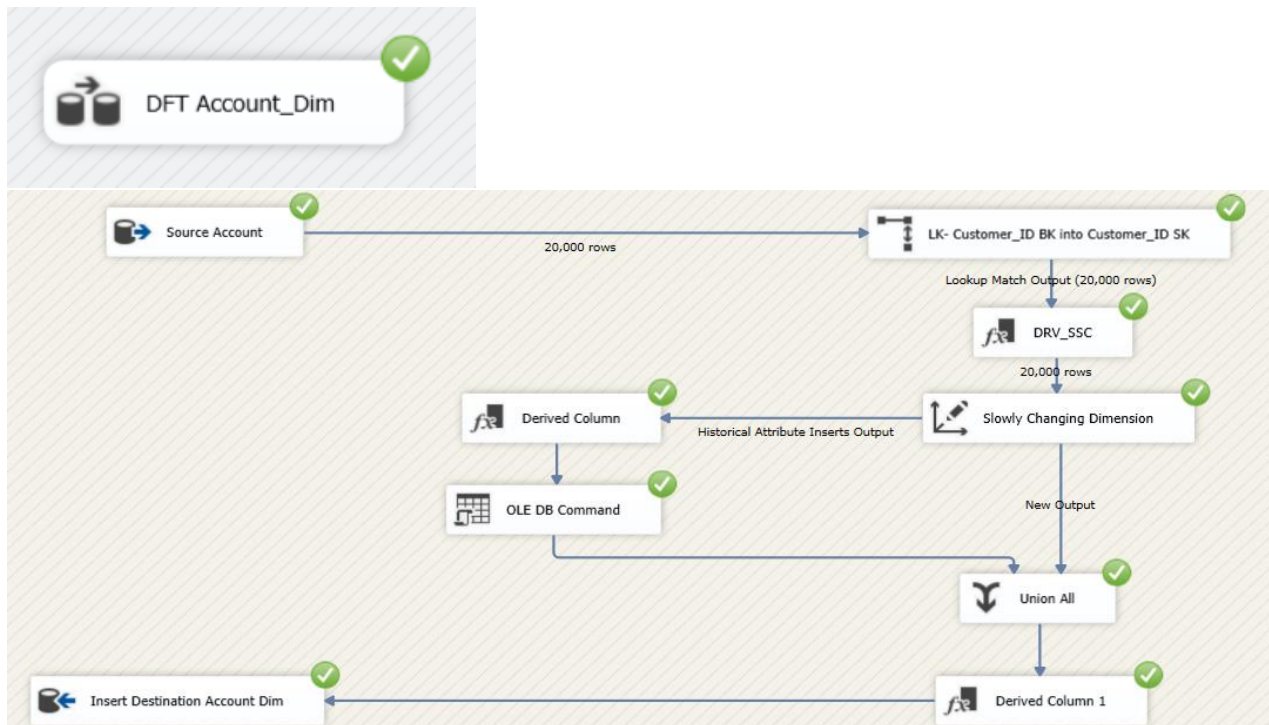
3.1.3. Customer Dimension



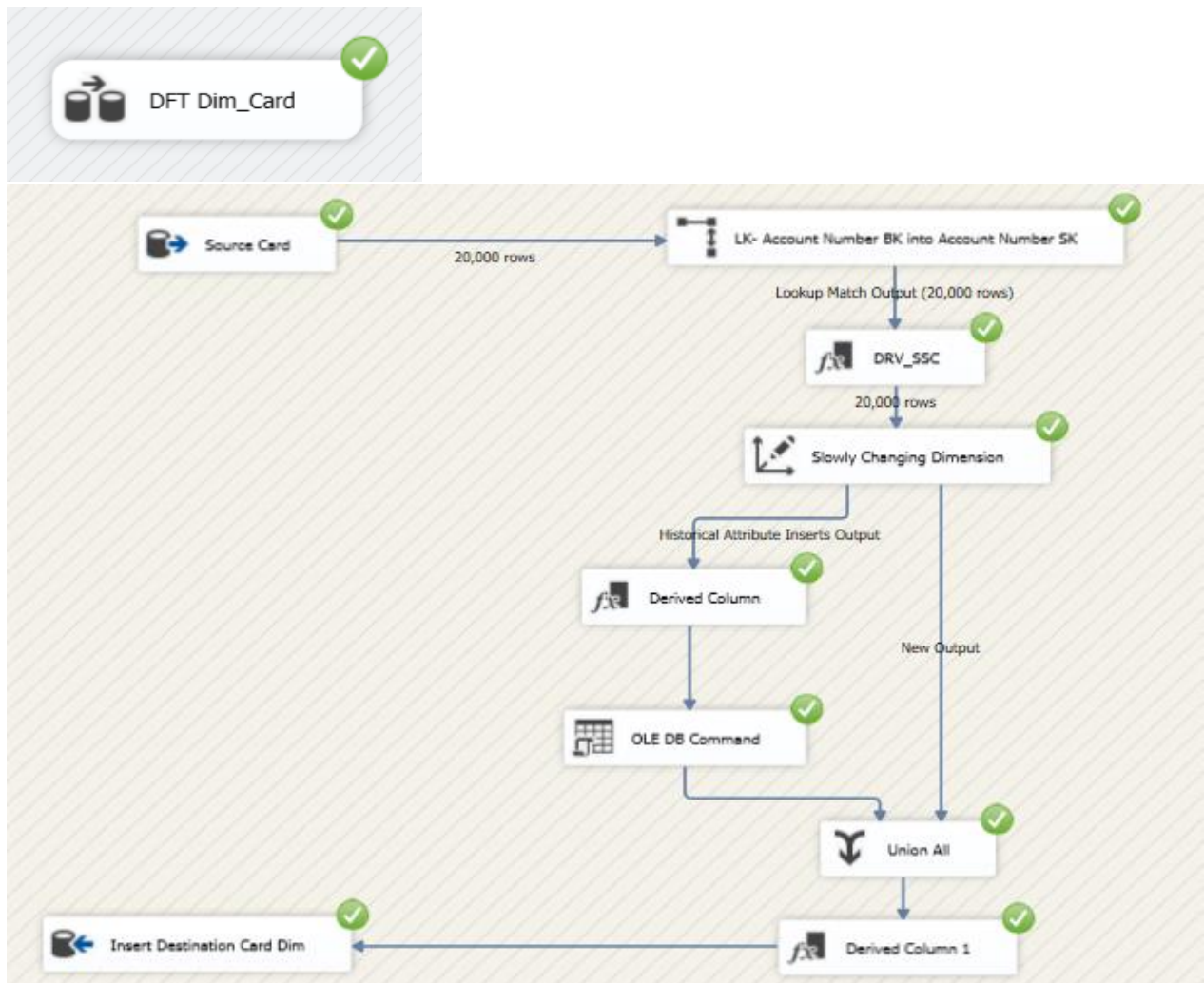
3.1.4. ATM Dimension



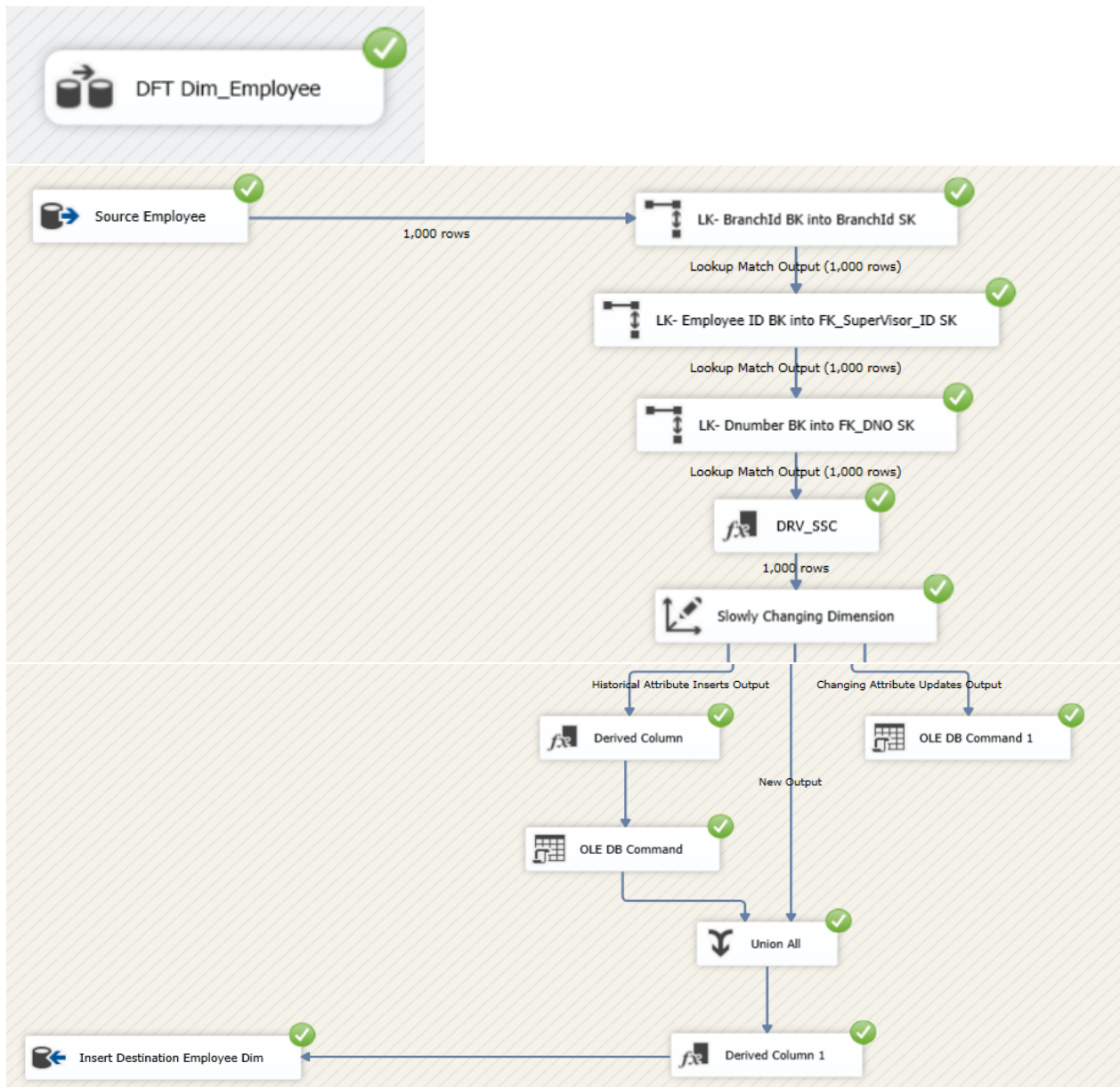
3.1.5. Account Dimension



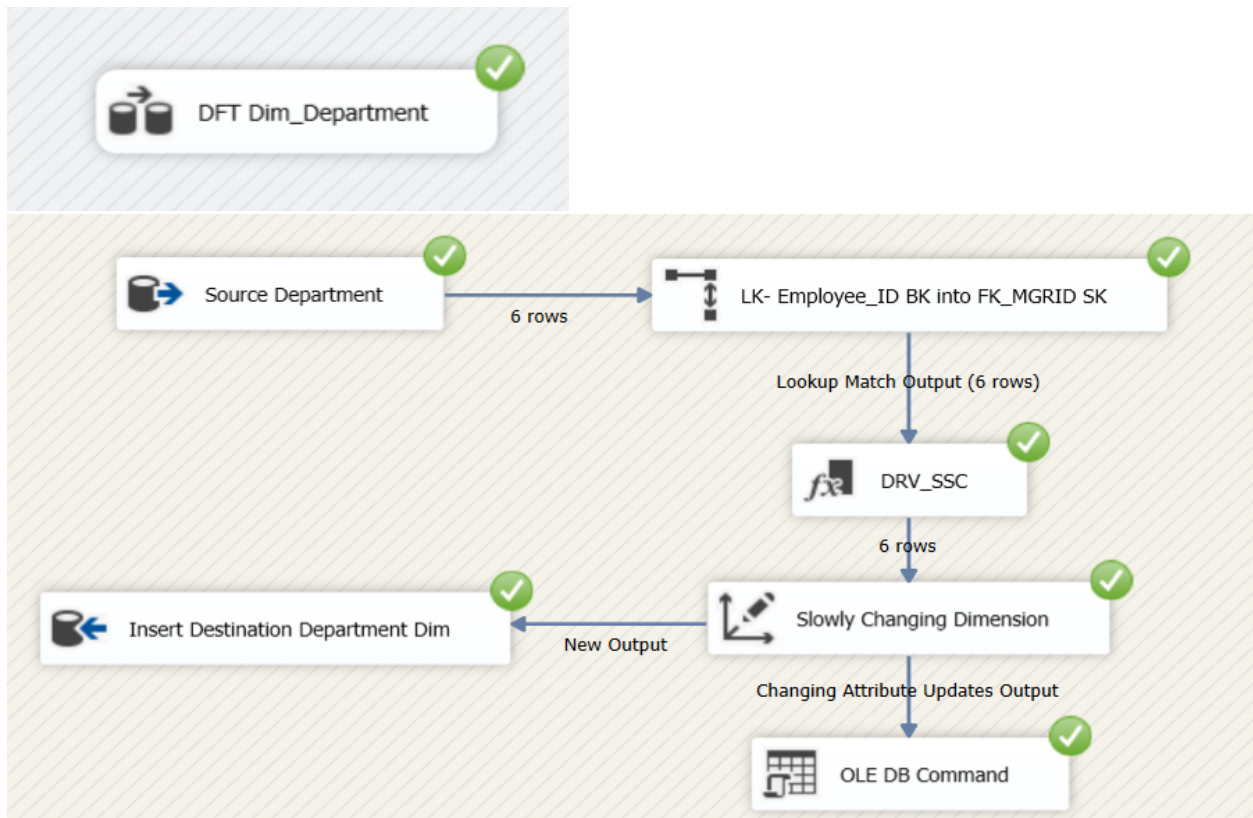
3.1.6. Card Dimension



3.1.7. Employee Dimension

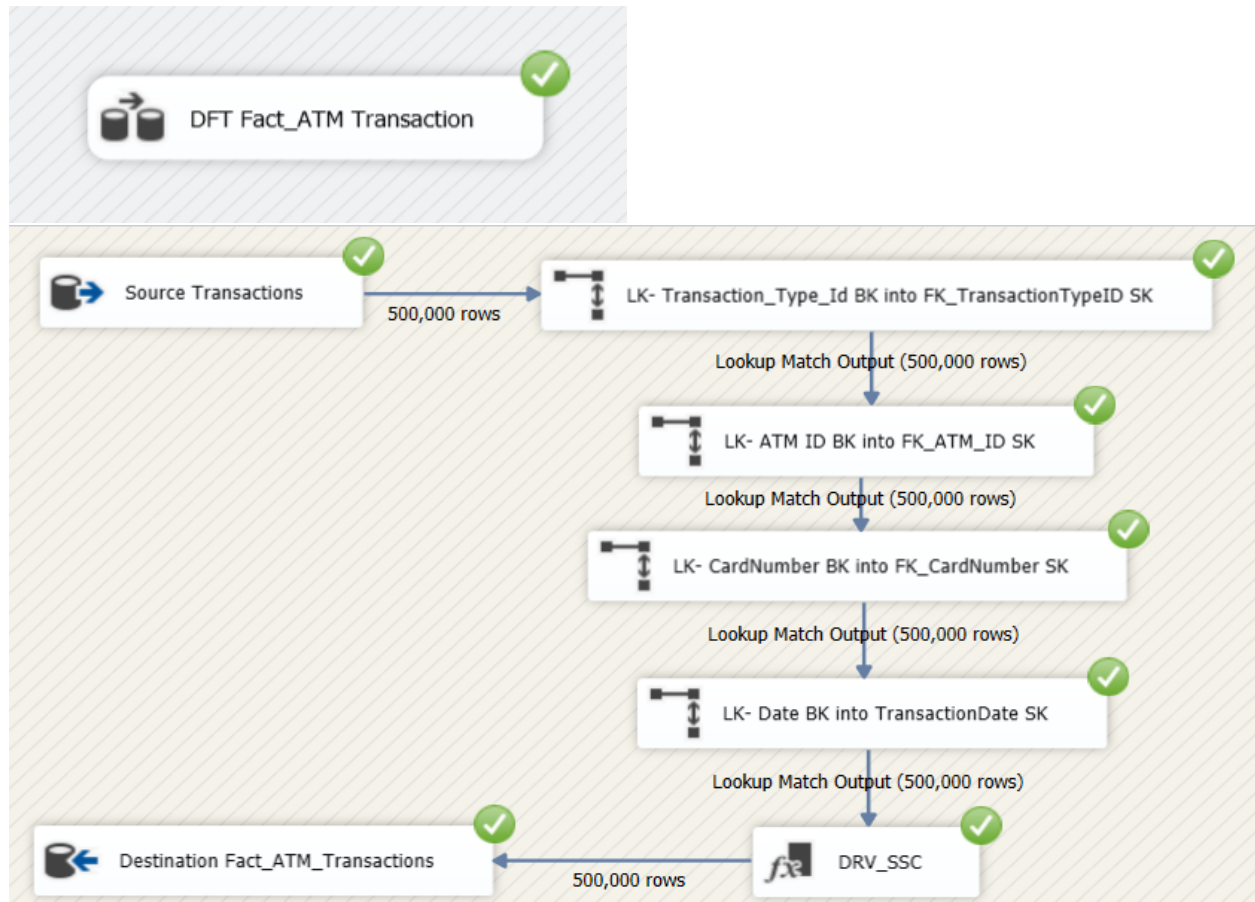


3.1.8. Department Dimension

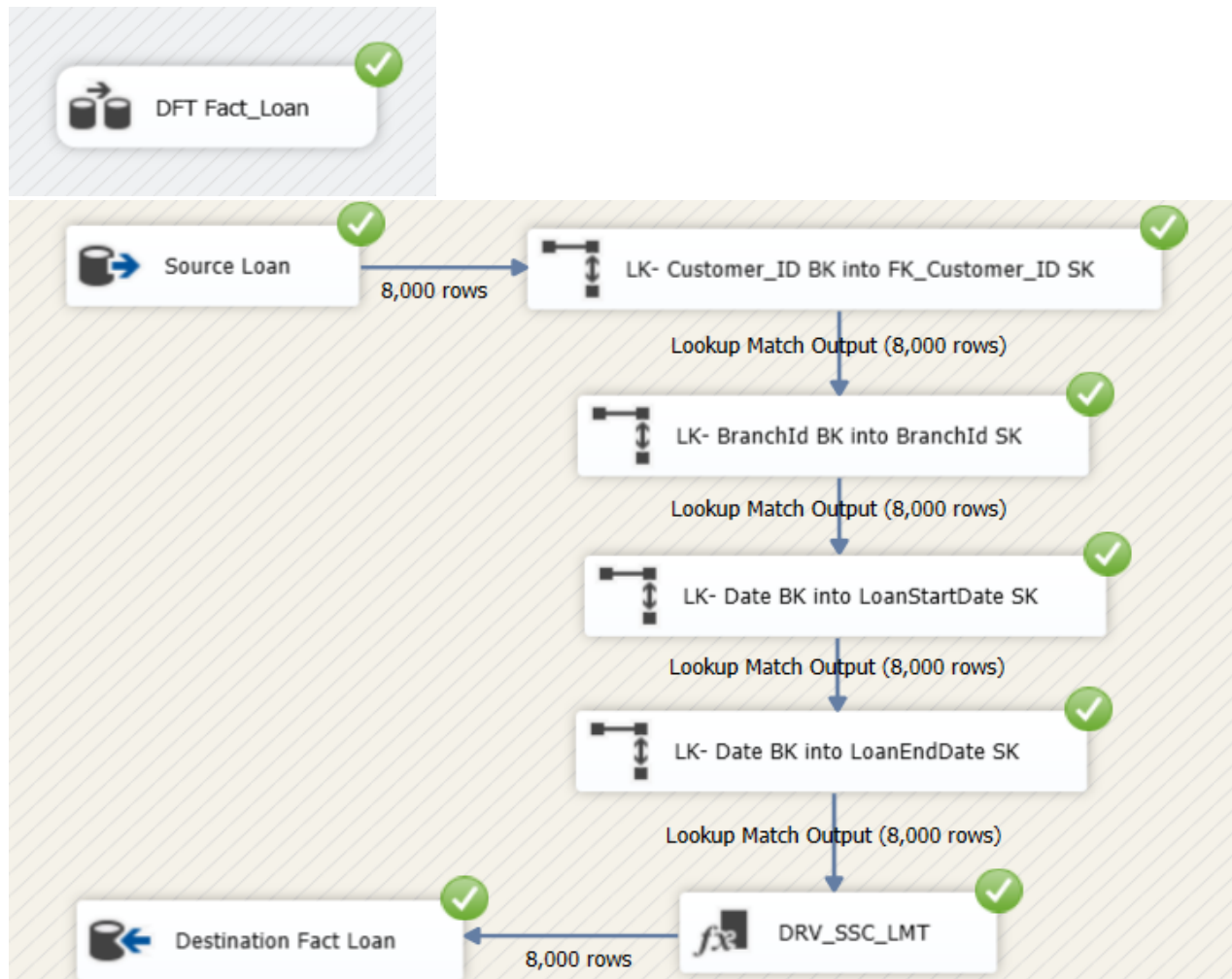


3.2. Fact Tables

3.2.1. ATM Transactions Fact



3.2.2. Loan Fact



4. SSAS

4.1. Fact Tables Measures

4.1.1. Total Amount of ATM Transactions

Branch Name	Branch Location	Transaction Type	ATM Status	Location	Card Type	Account Type	Total Amount
Alabama Uni...	Alabama	Balance Inquiry	Available	Alabama	Credit	current	207246.07
Alabama Uni...	Alabama	Balance Inquiry	Available	Alabama	Credit	savings	269160.67
Alabama Uni...	Alabama	Balance Inquiry	Available	Alabama	Debit	current	299687.85
Alabama Uni...	Alabama	Balance Inquiry	Available	Alabama	Debit	savings	289940.34
Alabama Uni...	Alabama	Balance Inquiry	Available	Alaska	Credit	current	38309.83
Alabama Uni...	Alabama	Balance Inquiry	Available	Alaska	Credit	savings	106093.95
Alabama Uni...	Alabama	Balance Inquiry	Available	Alaska	Debit	current	329977.6
Alabama Uni...	Alabama	Balance Inquiry	Available	Alaska	Debit	savings	12066.86
Alabama Uni...	Alabama	Balance Inquiry	Available	Arizona	Credit	current	33988.19
Alabama Uni...	Alabama	Balance Inquiry	Available	Arizona	Credit	savings	391614
Alabama Uni...	Alabama	Balance Inquiry	Available	Arizona	Debit	current	183541.31
Alabama Uni...	Alabama	Balance Inquiry	Available	Arizona	Debit	savings	63918.97
Alabama Uni...	Alabama	Balance Inquiry	Available	California	Credit	current	39385.15
Alabama Uni...	Alabama	Balance Inquiry	Available	California	Credit	savings	93481.72
Alabama Uni...	Alabama	Balance Inquiry	Available	California	Debit	savings	104207.82
Alabama Uni...	Alabama	Balance Inquiry	Available	Connec...	Credit	current	90225.99
Alabama Uni...	Alabama	Balance Inquiry	Available	Delaware	Credit	current	108391.72
Alabama Uni...	Alabama	Balance Inquiry	Available	Delaware	Credit	savings	145496.87

Branch Name	Total Amount
Alabama United Bank	153946512.56
Alaska United Bank	164900801.88
Arizona United Bank	127419079.99
Arkansas United Bank	102731946.51
California United Bank	133220074.89
Delaware United Bank	121529159.83
Florida United Bank	141053755.08
Hawaii United Bank	132445108.77
Tennessee United Bank	117559393.25
Texas United Bank	127138928.07

Transaction Type	Total Amount
Balance Inquiry	328010192.680001
Deposit	329436239.48
Transfer	331745758.89
Withdrawal	332752569.779999

Account Type	Total Amount
current	654130857.509999
savings	667813903.320004

4.1.2. Total Amount of Loans

Customer ID SK	Email	Mobile Number	Branch Name	Branch Location	Intrest Rate	Loan Month Terms	Total Amount - Loan Fact
20001	cynthia.brock@outlook.com	1674251139	Arizona United Bank	Arizona	0.15	53	2066984
20008	christopher.medina@yahoo.com	1274990886	Texas United Bank	Texas	0.15	40	2667643
20009	julie.roberts@gmail.com	4217469974	Alaska United Bank	Alaska	0.09	34	477607
20010	jessica.benton@yahoo.com	6943247890	Arizona United Bank	Arizona	0.15	20	338094
20011	sarah.ortiz@yahoo.com	8030618557	Texas United Bank	Texas	0.15	43	342609
20015	danielle.collins@yahoo.com	2181616419	Arizona United Bank	Arizona	0.09	52	1800924
20016	heather.martinez@gmail.com	1704693534	Florida United Bank	Florida	0.15	50	499469
20017	kenneth.meyers@outlook.com	2646535573	Florida United Bank	Florida	0.09	32	2406045
20018	beverly.lewis@outlook.com	2486148875	Arizona United Bank	Arizona	0.15	16	984247
20021	bethany.mayo@yahoo.com	5441522542	Texas United Bank	Texas	0.15	29	2715768
20022	jeffrey.morris@yahoo.com	5128997096	Arkansas United Bank	Arkansas	0.09	39	2251359
20024	ryan.graham@yahoo.com	9383942409	Tennessee United B...	Tennessee	0.15	13	1969095
20027	angela.anderson@yahoo.com	883888002	Florida United Bank	Florida	0.15	43	1615772
20028	william.holt@outlook.com	1751386445	Texas United Bank	Texas	0.15	57	2744530
20030	kimberly.scott@outlook.com	6026118780	Alabama United Bank	Alabama	0.15	24	1493708
20032	catherine.jones@outlook.com	2012204381	Tennessee United B...	Tennessee	0.15	27	359068
20033	kirk.knox@outlook.com	9477583395	Arizona United Bank	Arizona	0.15	22	1753240
20036	jason.andersen@gmail.com	5378518772	Alaska United Bank	Alaska	0.15	37	2190168
20038	vickie.good@yahoo.com	1619972167	Alaska United Bank	Alaska	0.15	25	642813
20040	ricardo.mcdonald@gmail.com	7153761726	Delaware United Bank	Delaware	0.09	36	2812738
20042	sean.jackson@outlook.com	5460972601	Arkansas United Bank	Arkansas	0.09	18	741173

Branch Name	Total Amount - Loan Fact
Alabama United Bank	1231269522
Alaska United Bank	1162191929
Arizona United Bank	1176850140
Arkansas United Bank	1195857769
California United Bank	1231250738
Delaware United Bank	1197182640
Florida United Bank	1220089905
Hawaii United Bank	1080138373
Tennessee United Bank	1210929295
Texas United Bank	1220270468

4.1.3. Loan Month Terms

Branch Name	Loan Month Terms
Alabama United Bank	29063
Alaska United Bank	28372
Arizona United Bank	28760
Arkansas United Bank	29735
California United Bank	29371
Delaware United Bank	27933
Florida United Bank	29301
Hawaii United Bank	27270
Tennessee United Bank	29222
Texas United Bank	28790

4.2. Excel Pivot Tables

- Total Amount of ATM Transactions by Branch

Branch Name ▾	Total Amount
Alaska United Ba	153946512.6
Alaska United Ba	164900801.9
Arizona United B	127419080
Arkansas United	102731946.5
California Unitec	133220074.9
Delaware United	121529159.8
Florida United Ba	141053755.1
Hawaii United Ba	132445108.8
Tennessee Unite	117559393.3
Texas United Bar	127138928.1
Grand Total	1321944761

- Total Amount of ATM Transactions by Card Type

Card Type ▾	Total Amount
Credit	50.14%
Debit	49.86%
Grand Total	100.00%

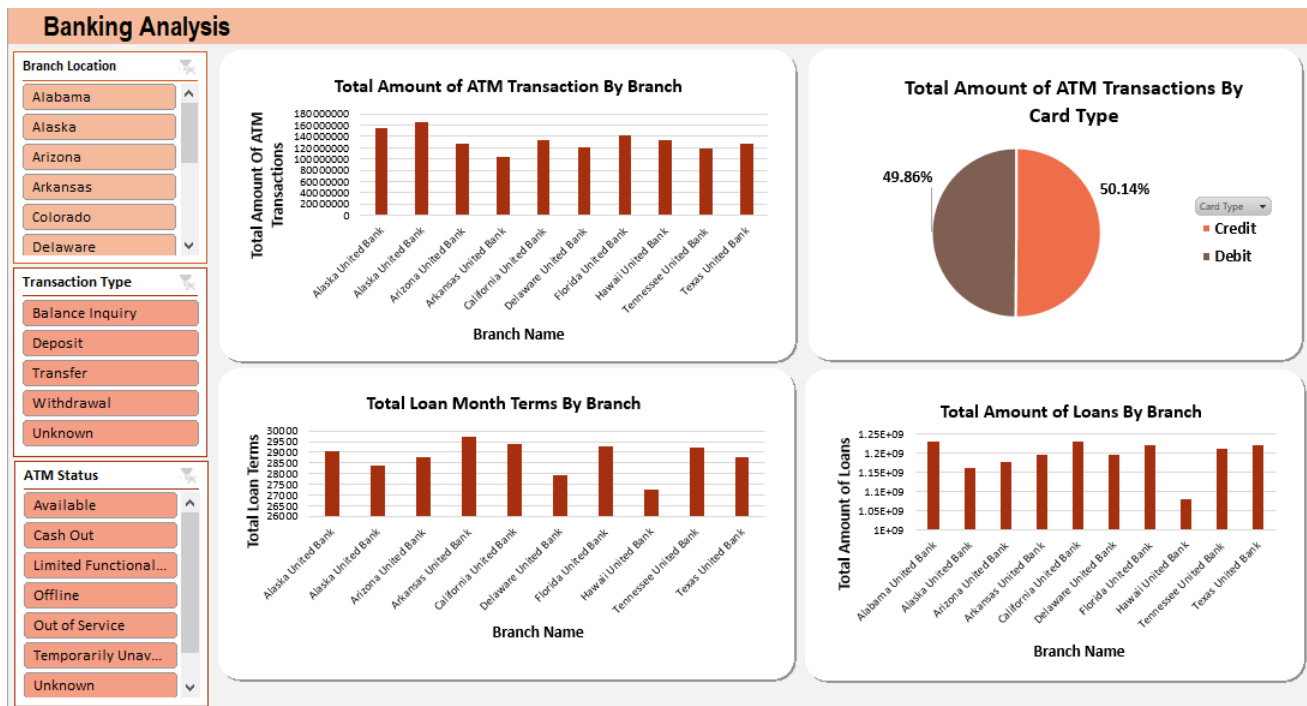
- Total Amount of Loans by Branch

Branch Name ▼	Total Amount - Loan Fact
Alabama United	1231269522
Alaska United Ba	1162191929
Arizona United B	1176850140
Arkansas United	1195857769
California Unitec	1231250738
Delaware United	1197182640
Florida United Ba	1220089905
Hawaii United Ba	1080138373
Tennessee Unite	1210929295
Texas United Bar	1220270468
Grand Total	11926030779

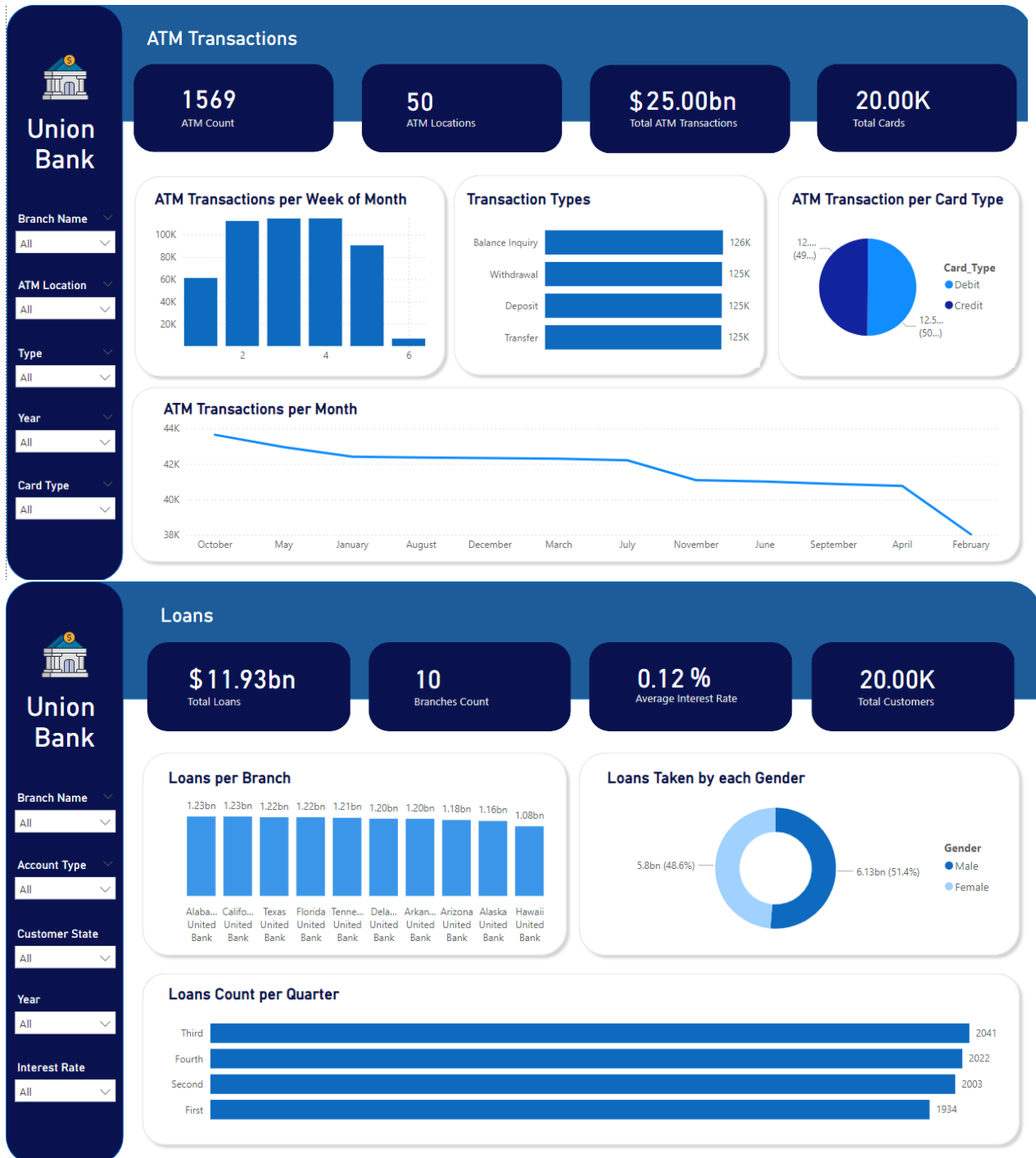
- Total Loan Month Terms by Branch

Branch Name ▼	Loan Month Terms
Alaska United Ba	29063
Alaska United Ba	28372
Arizona United B	28760
Arkansas United	29735
California Unitec	29371
Delaware United	27933
Florida United Ba	29301
Hawaii United Ba	27270
Tennessee Unite	29222
Texas United Bar	28790
Grand Total	287817

4.3. Excel Dashboard



5. Power BI Dashboard





Branch Name

All

ATM Location

All

Transaction Type

All

Year

All

Banking Analysis



51

Number of ATM Locations

10

Number of Branches

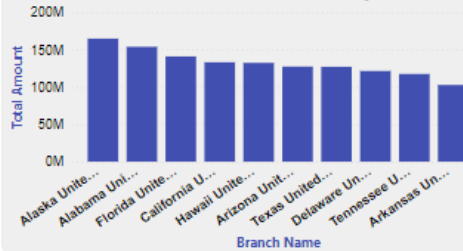
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Number of Years

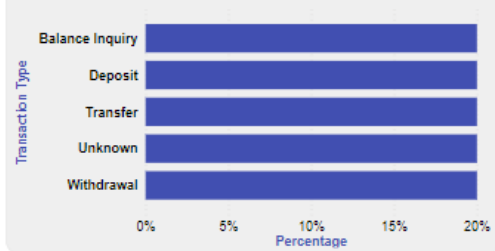
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Total Amount of Loans

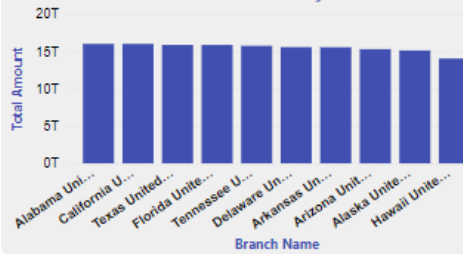
Total Amount of ATM Transactions by Branch



Percentages of Transaction Types



Total Amount of Loans by Branch



Number of ATMs per Branch

