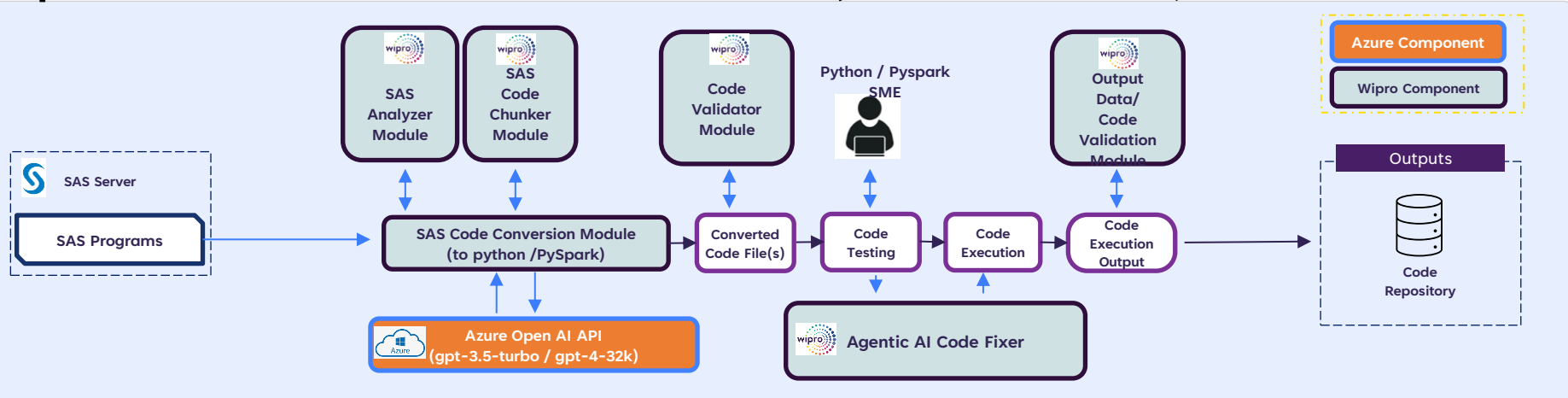




Wipro's Legacy Modernization Tool for Seamless SAS to Open-Source Migration

Powered by Azure OpenAI

Wipro Gen AI SAS Code Conversion Tool (Functional Flow)



Key Highlights



Powered by Azure Open AI, the tool automates SAS code conversion into Python, PySpark, and R.



Built in features for quality assurance to ensure that the code is converted accurately and completely.



Reduces manual effort from 50% to 70% for any complex to medium complex SAS conversion projects.



Comprehensive syntax support for SAS including data steps, macros, procedures and functions.

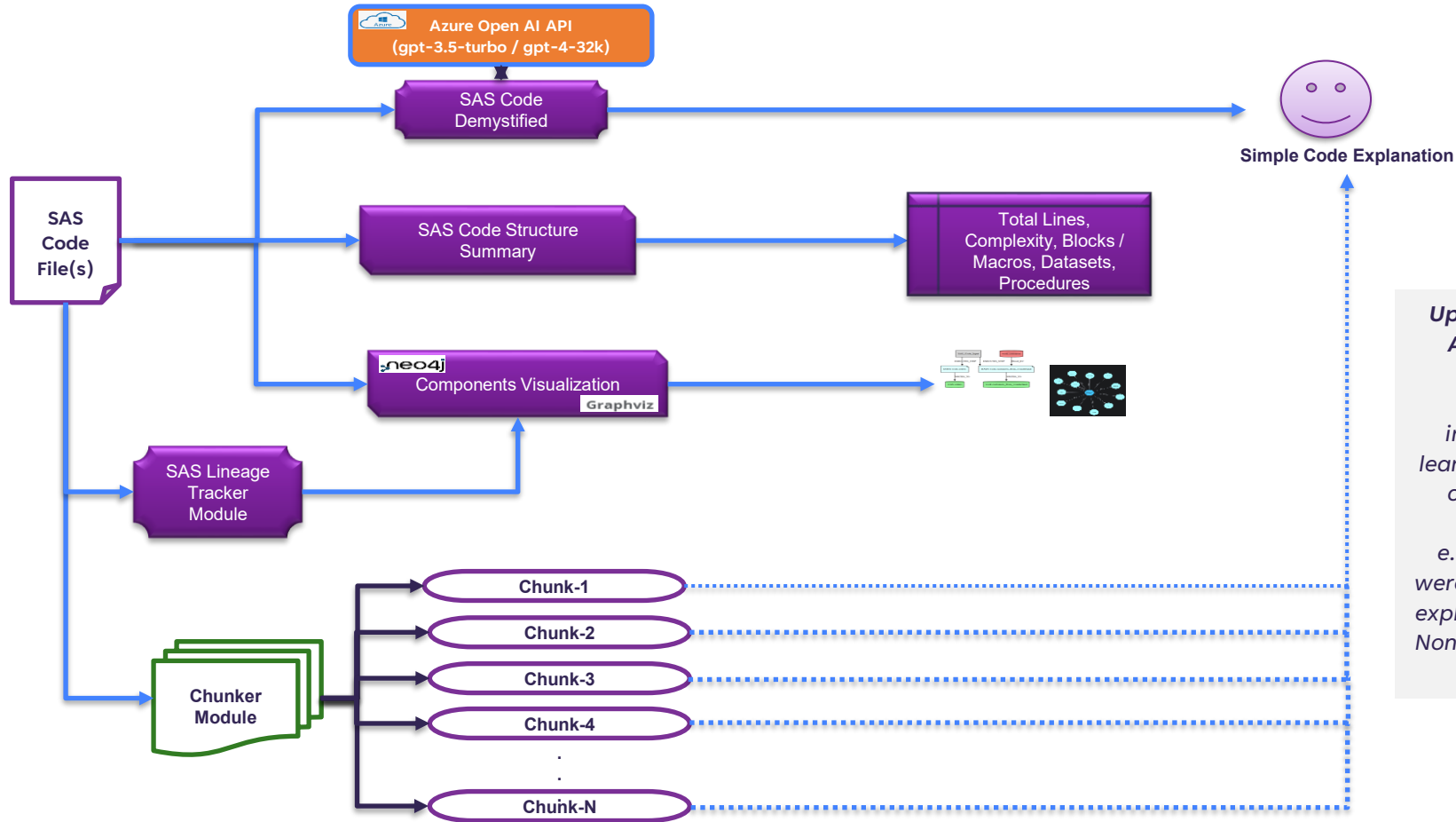


Automatically analyzes SAS codes to derive key metrics like lines of codes, complexity, code components etc.



Easy-to-use interface that allows developers to quickly & easily convert code from SAS to open-source languages.

Wipro Gen AI SAS Code Conversion Tool – SAS Analyzer Module

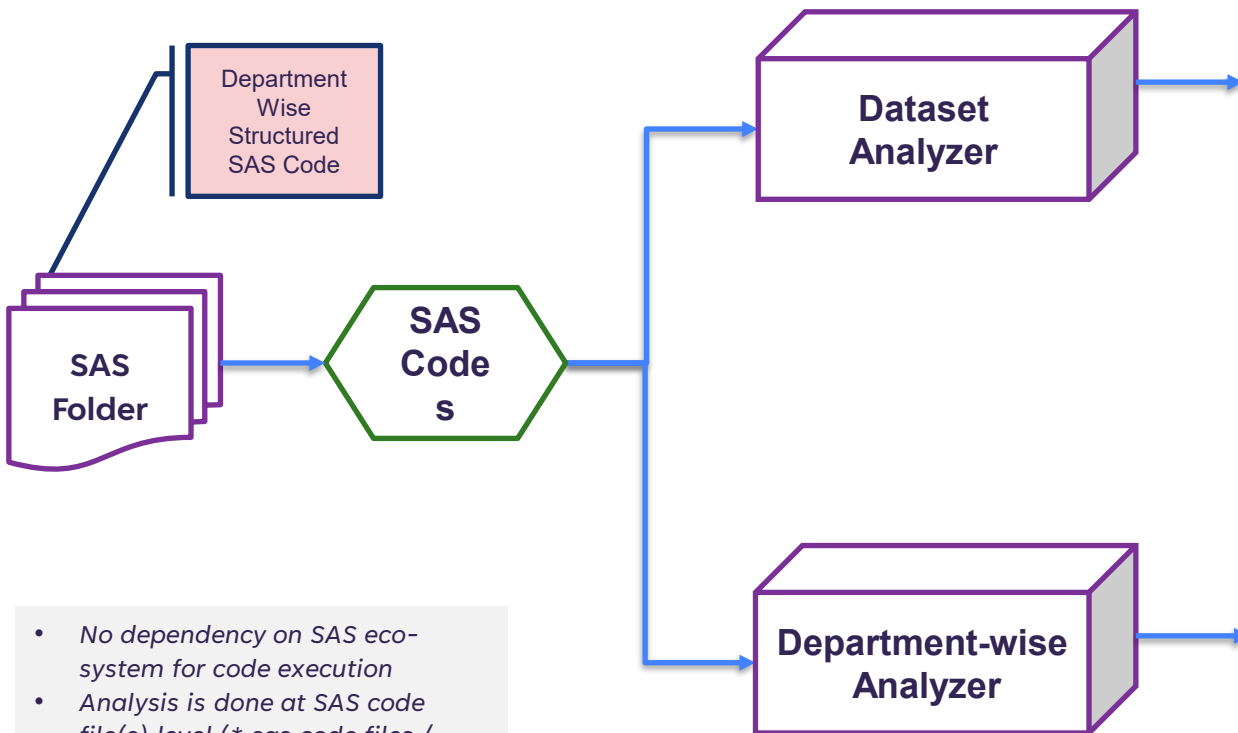


Upgraded SAS Code Analyzer Module

New features introduced as per learnings from various customer demos.

e.g. Few Customers were looking for simple explanation of code for Non-technical Business Users.

Wipro Gen AI SAS Code Conversion Tool – SAS Analyzer Module

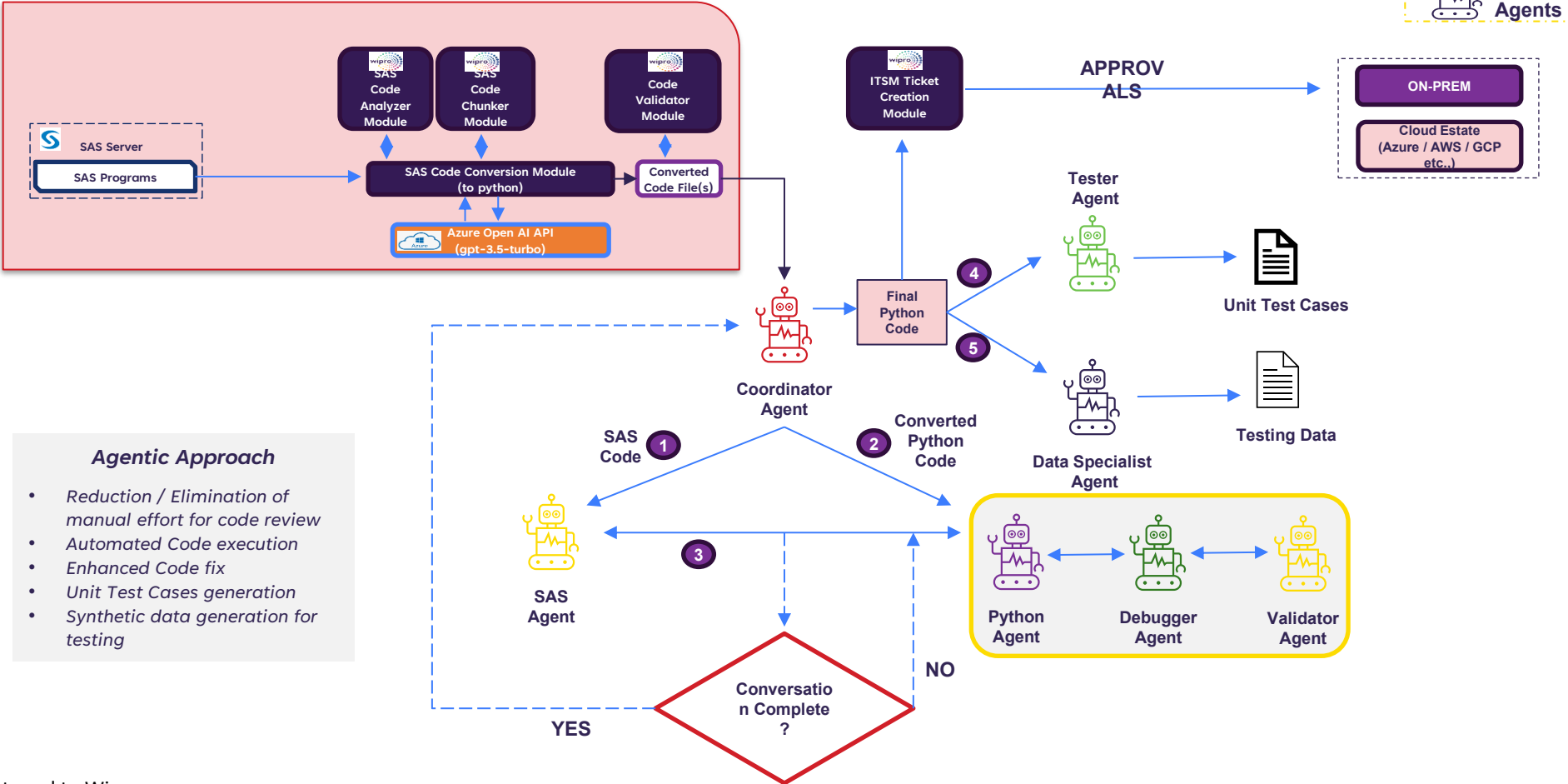


- No dependency on SAS eco-system for code execution
- Analysis is done at SAS code file(s) level (*.sas code files / *.txt files with sas code)

Data Set Analysis	
Data Set Name	Count
null	19
xdata.temp	9
xdata.temp2	6
_xxx	2
s	2
s2	2
xdata.varh	2
xdata.varp	2
x	1
original	1
lin_stat_score	1
inner	1
score	1
k_u	1
inner2	1
score2	1
k_u2	1
xdata.pums_la	1

Department Analysis							
DEPARTMENT	DATA SET Count	Data Set Names	Macros Count	Macro Names	Procedures Count	Procedures Names	Total Lines of Code
Collection	7	_null_, _xxx, x, xdata.pums_la	8	count_p, getname, longtowie, m_keep, macro, mend, sysevalf, to	5	glimmod, means, sql, transpose	1003
DM	3	_null_	8	count_p, getname, longtowie, m_keep, macro, mend, sysevalf, to	0	nan	219
RISK	13	_null_, inner, inner2, k_u, k_u2, lin_stat_score, original, s, s2, score, score2	4	callr, macro, mscript	17	corr, export, means, princomp, score, sql, transpose	214

SAS to Python Migration – Agentic Flow (Lift and Shift)

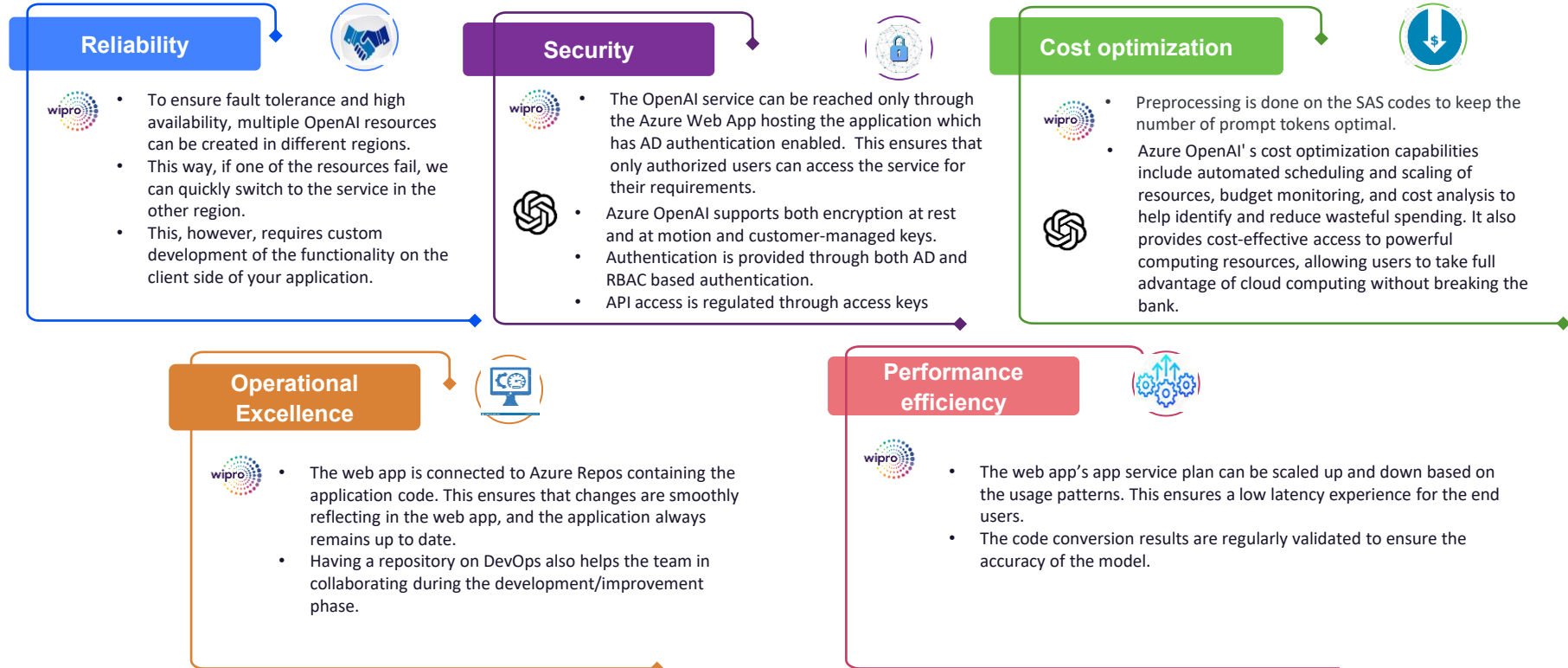


Agentic Approach

- Reduction / Elimination of manual effort for code review
- Automated Code execution
- Enhanced Code fix
- Unit Test Cases generation
- Synthetic data generation for testing

Achieving a Well-constructed Legacy Modernization Tool by Wipro

Incorporating these foundations helps generate well-constructed tool.





Thank you