

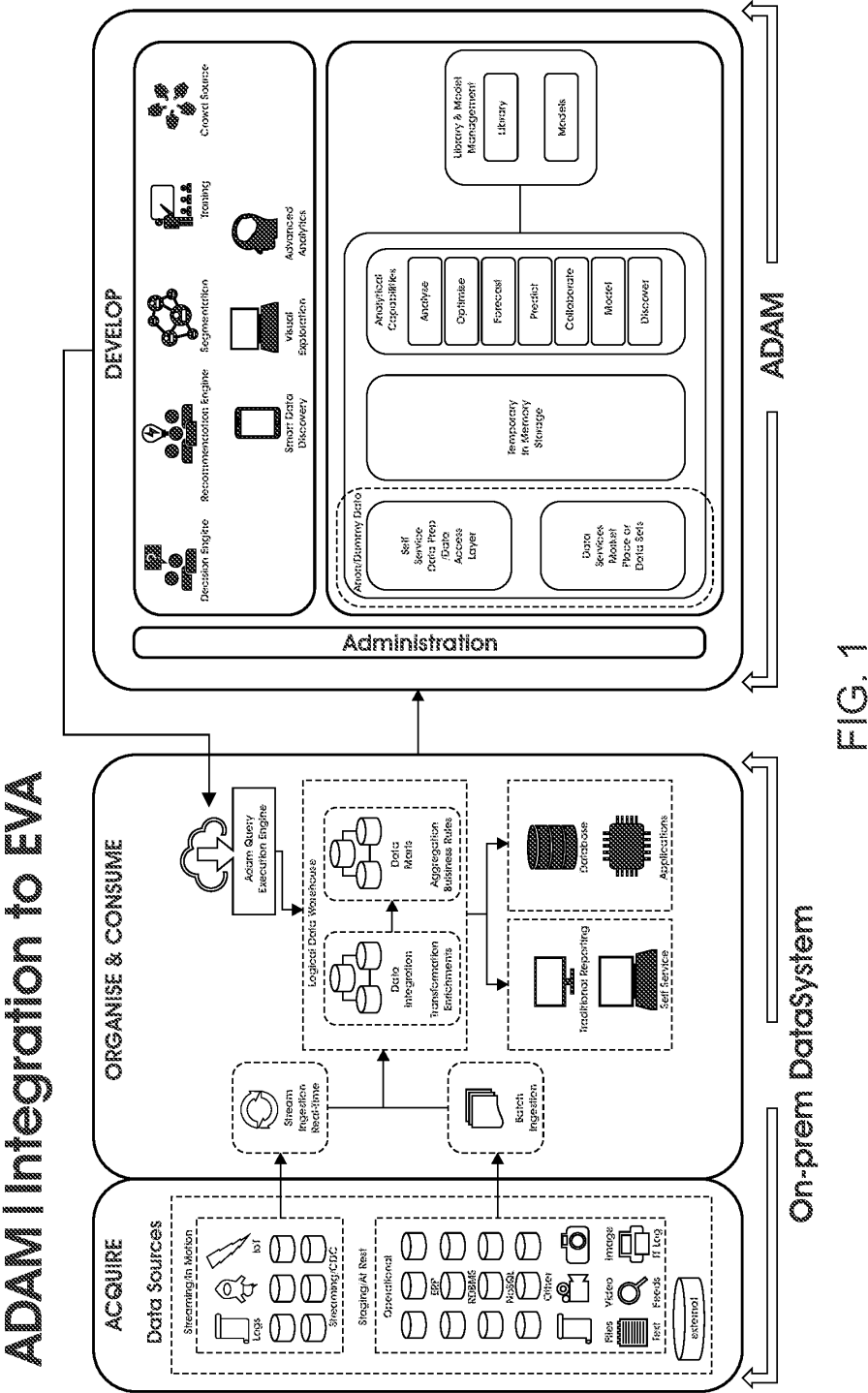
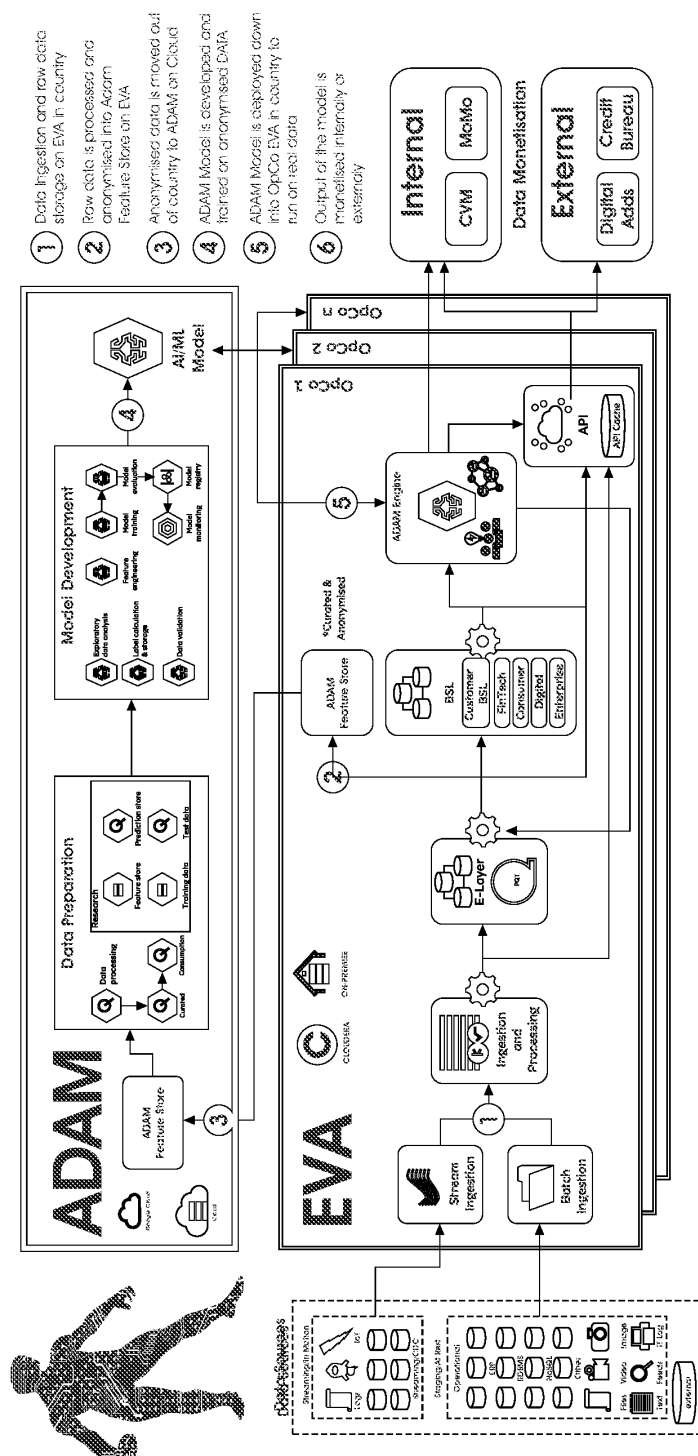
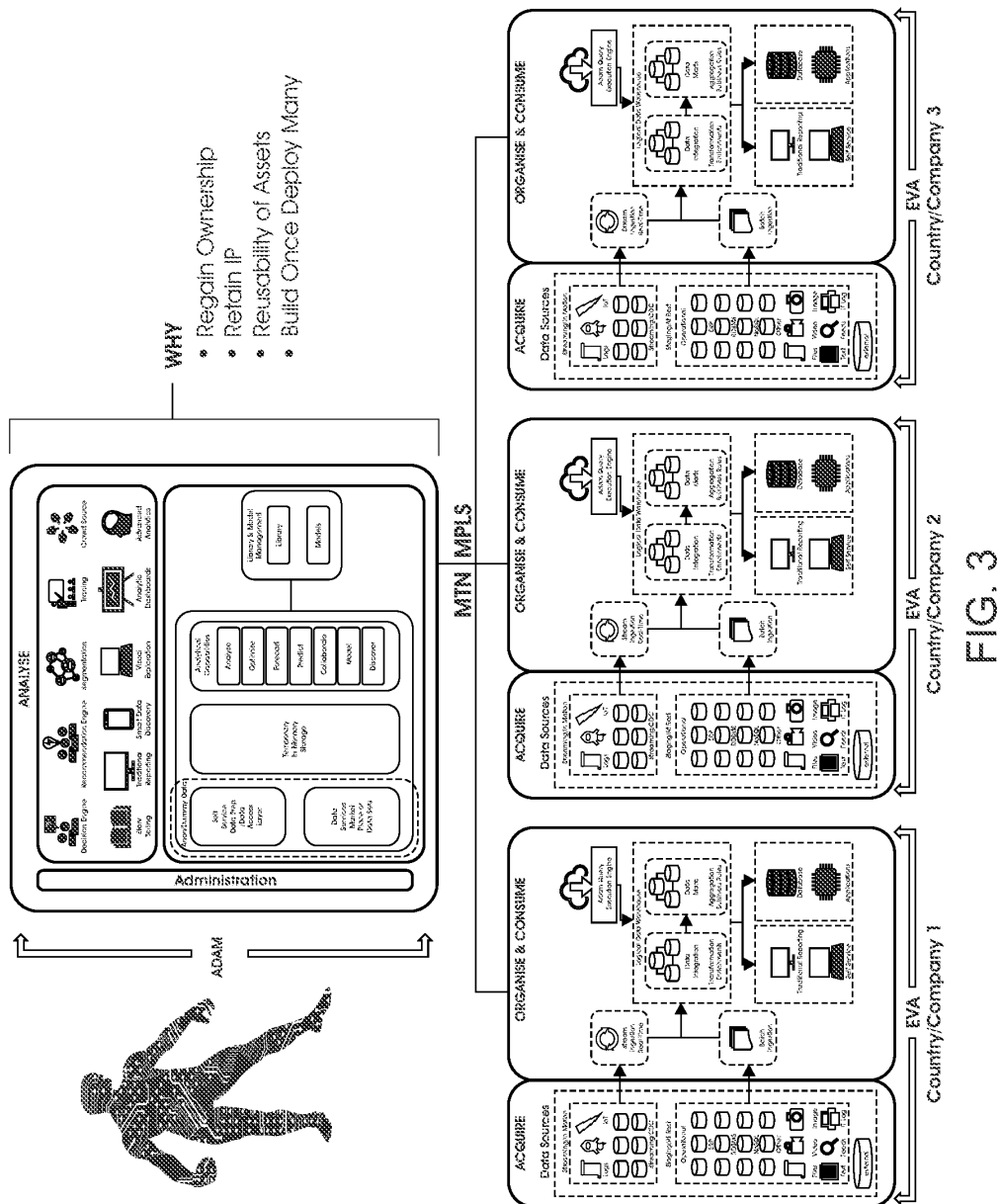


FIG. 1

ADAM High level process flow

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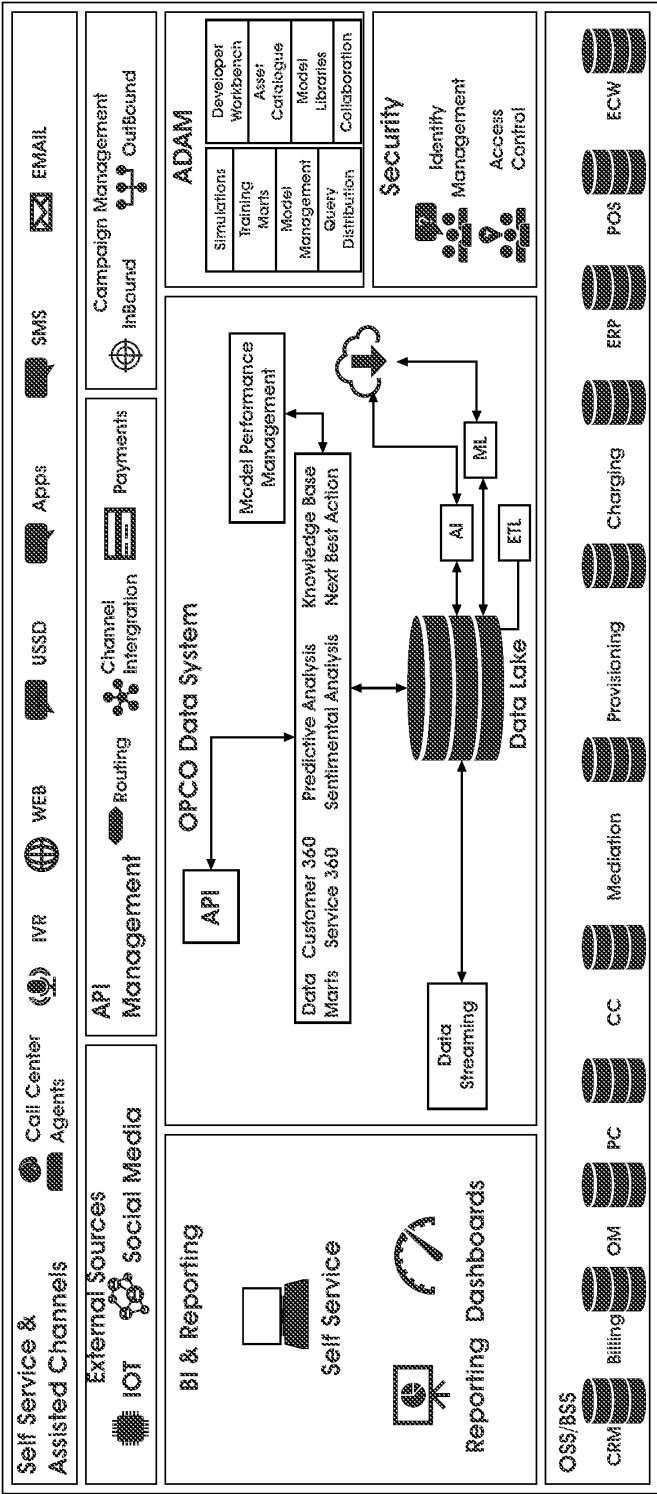


FIG. 4

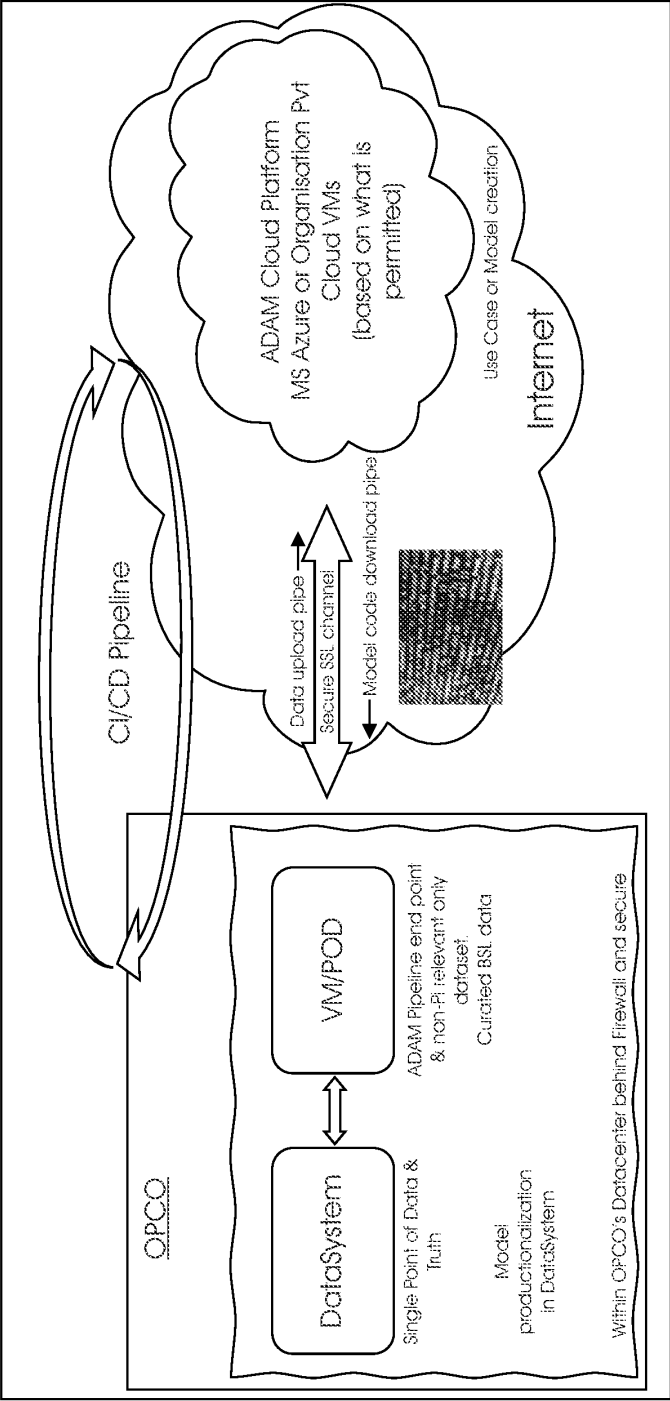


FIG. 5

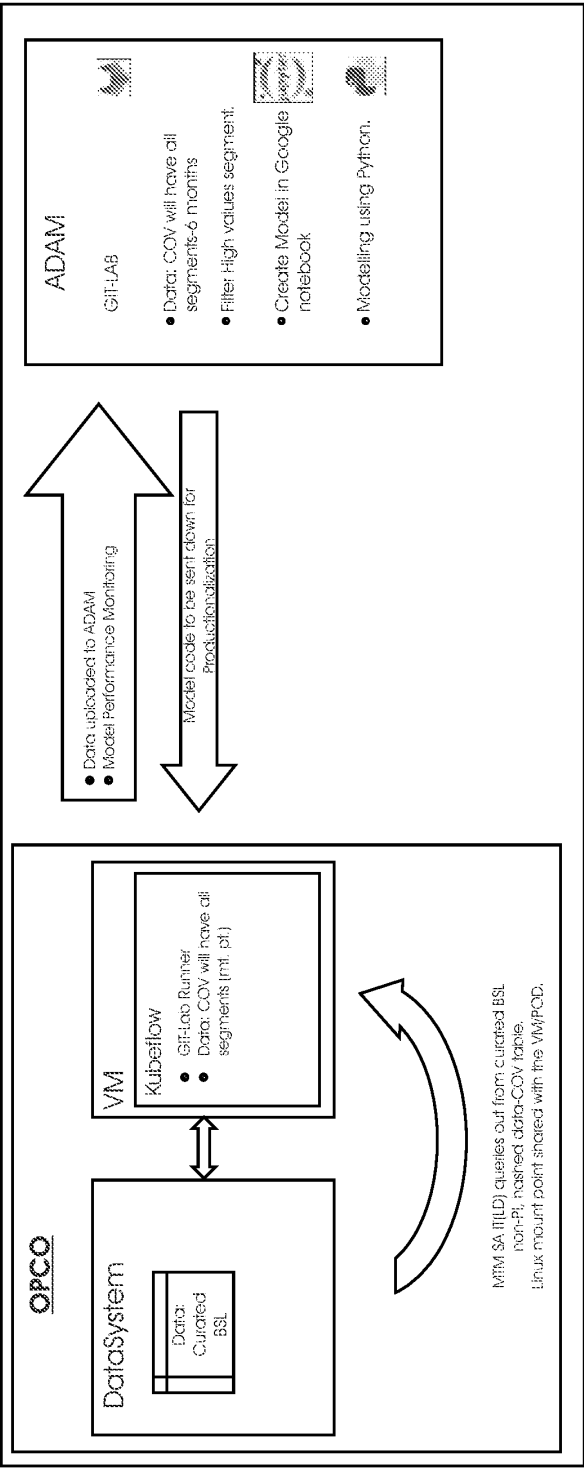


FIG. 6

S.NO	Principle Name	Description	RAG	Comments
1	Maximise benefit at lowest risk of cost	Strategic decisions for Technology must always strive to maximize benefits generated for the business at the lowest long-term risks and costs- this applies to Group, OPCO and Group Entity		1 platform for all OpCos. Save on subscription fees. Build Once Deploy Many
2	Future Proof Technology	Leverage on up to date systems and future proof components to deliver new products and services		Data Science platform based on AI/ML to support advanced analytics decision making
3	Open Source Adoption	Create opportunities for innovation and co creation by adopting open source, which has become the global standard for technology openness		The platform will leverage open source languages, namely Python and R
4	Loose Coupling of Functions	Decouple applications for alignment with modular, open and extensible platforms based on SOA, API ETSI, IEEE, IETF and ITU-T and 3GPP standards and principles		Capabilities could be fulfilled by multiple components so that it could easily be upgraded or swapped out.
5	Standardization of Equipment and Platforms	OPCOs and Group Entities must align to Group Standard sets for Technology platforms and Network Equipment for example BTS site equipment, RAN, Software versions and platforms for OSS & BS		Standard platform for Data Science across the organisation
6	Cloud First	All OPCOs, Group and its entities must adopt a cloud-first architecture by focusing on innovation solutions, which do not have any infrastructure dependencies		The platform will be cloud first so that it is easily accessible by multiple opcos
7	API First	In all OPCOs, Group and its entities applications, system platforms and services must expose their data and functionality and must communicate with each other only through these published interface		Integration with EVA will be via APIs for model performance results and execution of training jobs

FIG. 7

S.NO	Principle Name	Description	RAG	Comments
8	Process Standardization	All OPCOs, Group and its entities must use the universal and global business process versions and definition and it applies to OSS and BSS across the value chain irrespective of Operating Company		Best practices will be defined for all OPCOs and Marico functions that develop ML/AI models in ADAM
9	Real Time Data Availability	All OPCOs, Group and its entities must enable data to be timely retrieved, in the proper place and to be used in the proper way on a real time basis from your Customer Mgt, Billing, Product Catalog and other BSS systems via API/service integration, this includes OSS APIs where applicable		Certain models will be required access to data near real time locally in an OpCo
10	Data Masteryship	All OPCOs, Group and its entities must implement data management to provide a common information model, including customer master and product master information. The master version of shared data must be stored in a central location, where master data needs to be distributed; it must be managed in a way that ensures consistency across all locations by a master slave relationship		This will be maintained and all data for analytical purposes will come into EVA and be processed there.
11	API Development & Design	All OPCOs, Group and its entities need to be aware that API's will be segregated into System API's, Process API's and Experience API'		For certain models, the model result will be stored in EVA and exposed to other systems through Restful APIs
13	Single Version of the Truth	All OPCOs, Group and its entities must use a single system and process per function for all product lines, service types, customer segments and line of business		In the production state, the models built on ADAM will persist its results in EVA and no other store
14	Data is an Asset	All OPCOs, Group and its entities must understand that data is an asset that has value to the enterprise, and it has to be managed accordingly		We will use data to derive value for MTN as well as govern the processes

FIG. 8

S.NO	Principle Name	Description	RAG	Comments
15	• Data security	• All OPCOs, Group and its entities must ensure that data is protected from unauthorized use and disclosure, protected at rest in transit and in-use data should be well-managed (lifecycle, classified).		
16	• Security by Design	• All OPCOs, Group and its entities must ensure that controls for the protection of confidentiality, integrity, and availability should be designed into all aspects of solutions from initiation, not as an afterthought. Security should be designed into the business processes within which an IT system will be used		
20	• Data Sovereignty	• All OPCOs, Group and its entities must ensure that there is clear visibility of customer data shared with VAS & Content partners, when is it domiciled and how is used especially in countries where we have regulatory concern around GDPR		• Models will process data in country
21	• Application Security	• All OPCOs, Group and its entities, Security needs to be built into capabilities across the experience, engagement and records layers, Security solutions need to take into cognizance capabilities standard (for that domain), customer experience elements e.g. channels		• Individuals will be exposed to projects that they are supposed to have access to

FIG. 9

ADAM | Logical Architecture – Target Alignment

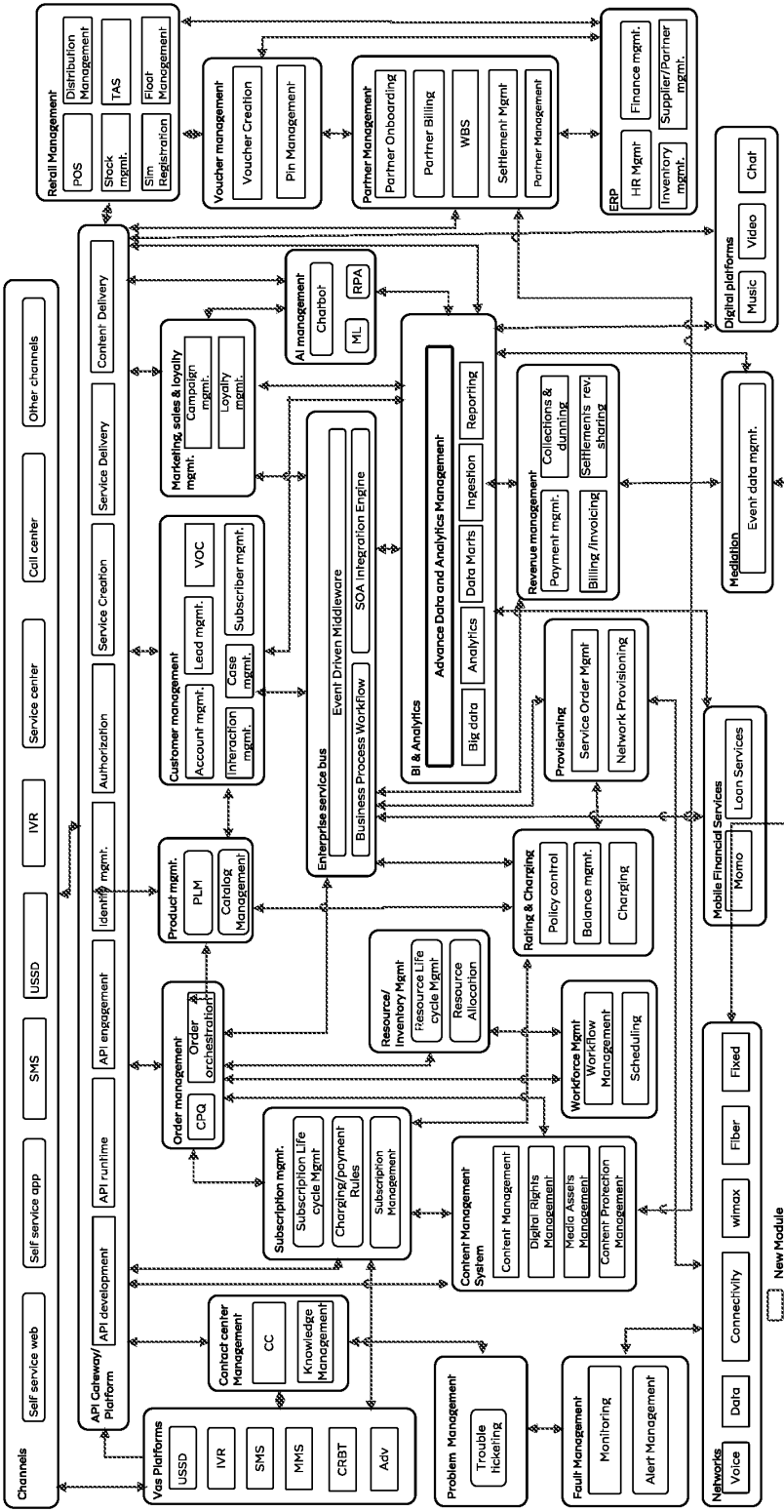


FIG. 10

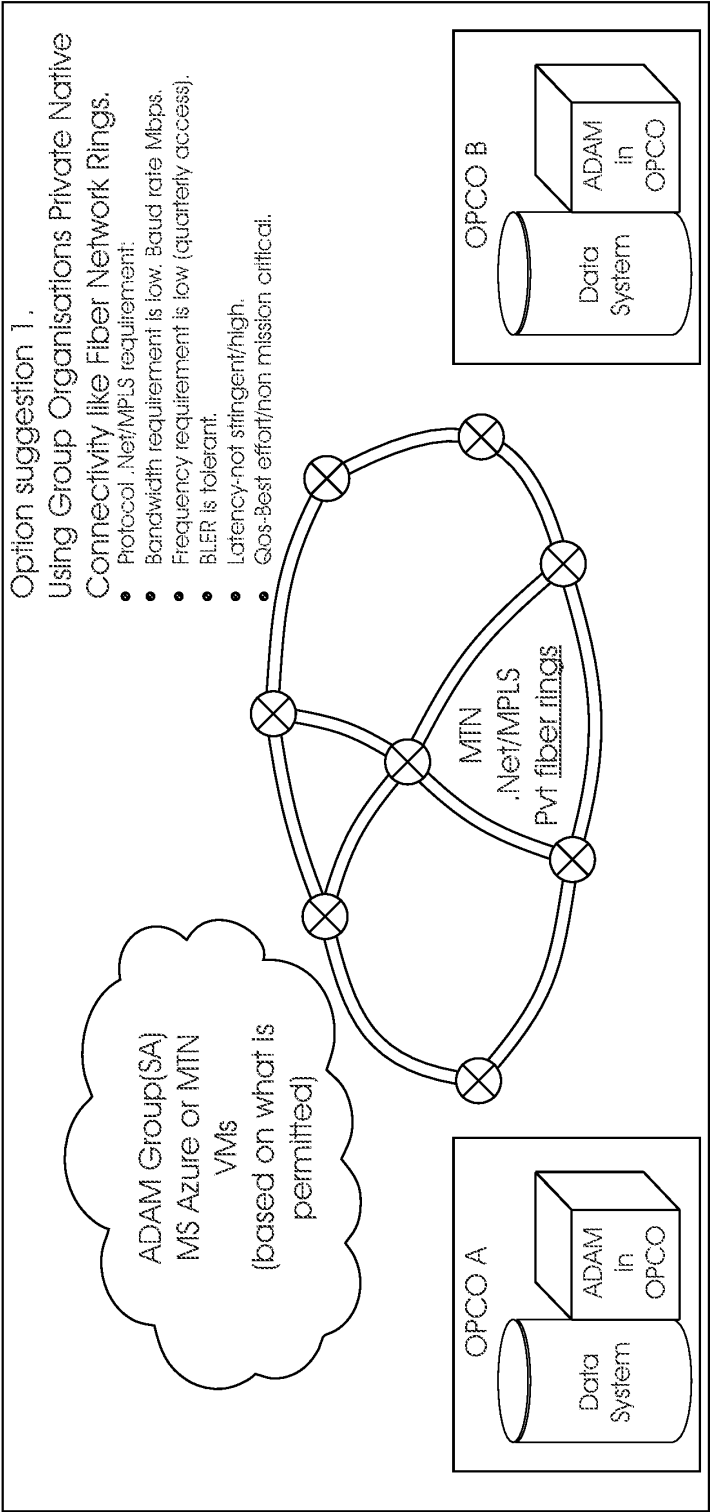


FIG. 11

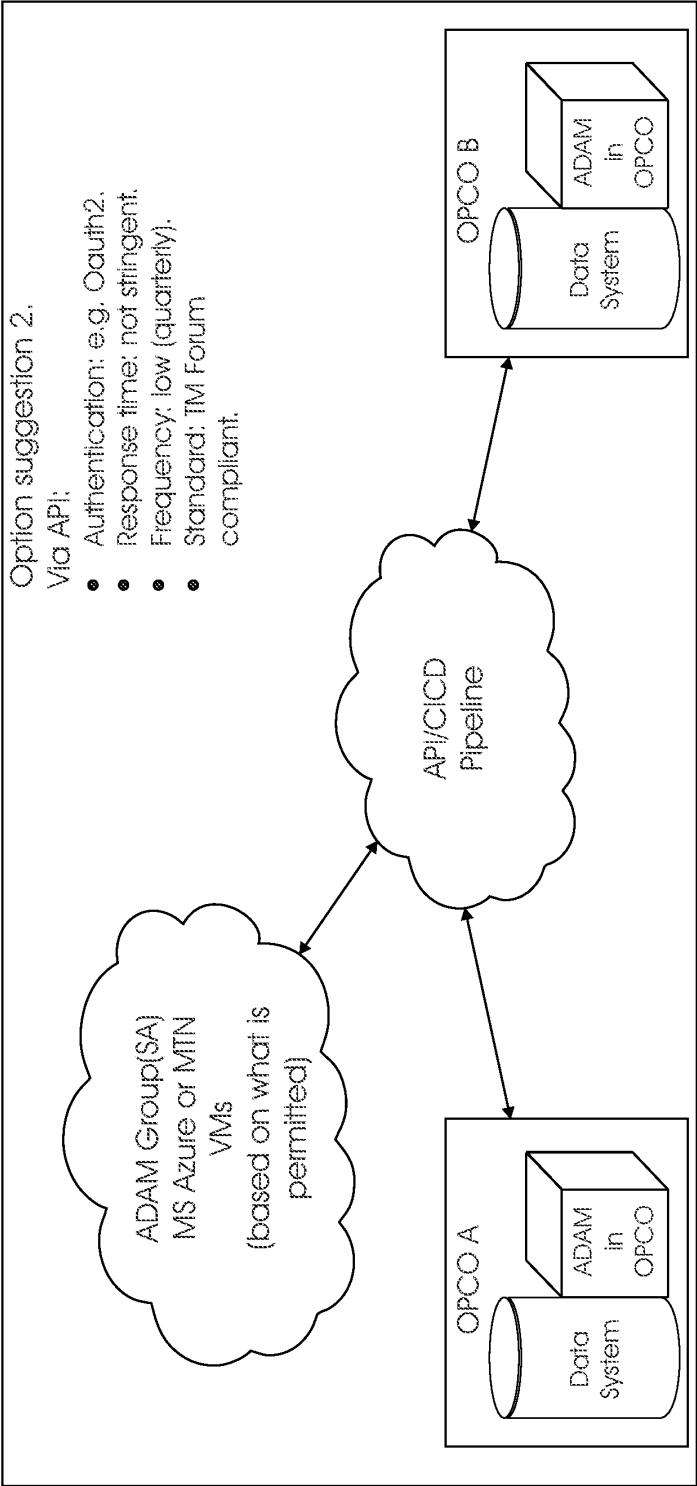


FIG.12

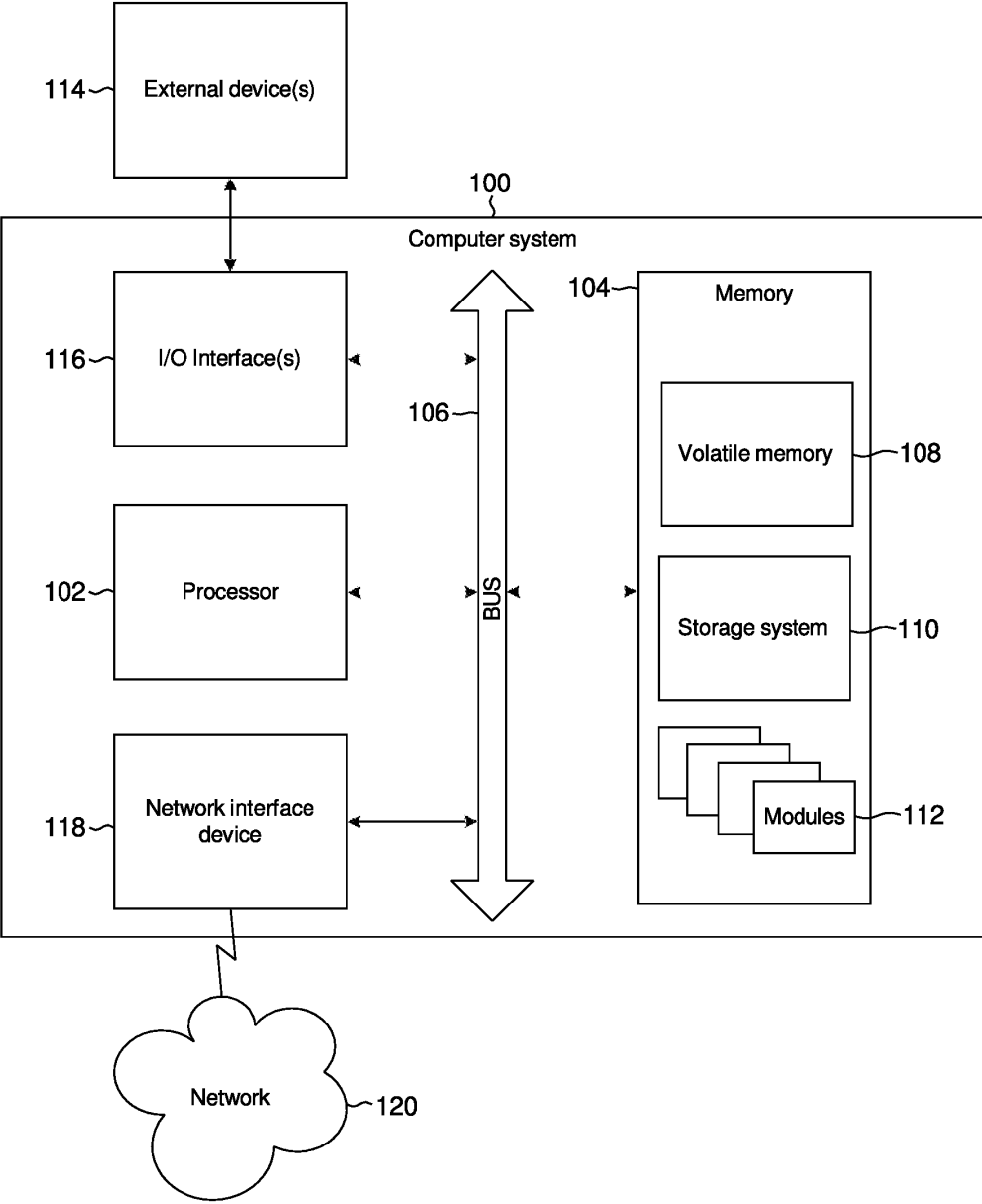


FIG. 13