	Functionalities		Desirable	FEWS	LEAD	MADIS	DIAS	MSM	WDIAS
Data Storage	Framework data storage mechanism	Central data storage		X				X	
		Resource pool	X		X	X	X		X
		Flexibility of database structure			X				X
	Independent of underline databases				−				X
Performance	Scalability	Scale by adding more resources	X	X	X	X	X	X	X
		Scaling on demand by adding more resources	X		X		X		X
		Elasticity	X		X				X
	Availability	High availability	X		X	X	X		X
		Fault tolerance	X		X	X	X		X
	Cloud computing	Easy pluggable to cloud computing	X		−				X
		On-demand resource allocation	X						X
	System deployment	Continuous deployment without downtime	X		X	−	−		X
		Independent subsystem deployments	X		X				X
		Support a proper dependency handling mechanism		X				X	
Architecture	Architecture pattern	Distributed client server		X					
		Distributed monolithic				X	X	X	
		SOA	X		X				
		Microservice	X						X
	Loose coupling	Subsystem independency	X	X	X	−	X	X	X
		Programming language independent subsystems	X		−		−		X
	Extendability	Architectural independency to ingregrate new subsystems			X			X	X
		Extendable data integration support	X	X	X	X	X	X	X
	Availability of source code		X					X	X
	Data preprocessing	Data preprocessing		X	X	X	X	X	X
		Programming language independent preprocessing modules	X		−		−		X
		Add new preprocessing capabilities without system downtime	X		X	−	−	−	X
		Run preprocessing with auto scaling	X		X				X
Other	Workflow engine			X	X			X	
	Model execution and integration			X	X			X	