Table-1 : Components & Technologies:

S.No	Component	Description	Technology
1.	Data collection and data analysis	Collect data and analyze the data from different stakeholders, countries	Data analytics, Machine Learning, Data Mining.
2.	Stakeholder engagement	Communication between stakeholders and other borrowing countries	Communication platform, data sharing technologies
3.	Risk Assessment	Identifying risks associated with lending process is important for safeguarding financial stability	Risk assessment models,, data analysis tools
4.	Legal compliances	Adhering to legal frameworks and ethical guidelines ensure lending practices are fair and transparent	Legal framework and compliance monitoring tools.
5.	Financial stability	Ensuring financial and economic stability is critical for both the borrowing and lending countries	Financial market analysis tools, economic data sources.
6.	Cloud Database	Database on cloud to store all the data for processing analysis, data mining and all related processes	IBM DB2, IBM Cloudant etc.
7.	Public awareness	Raising public awareness about the impacts of debt traps .	Data visualization tools , public relation aids
8.	International policies	Coordinating international policies and agreements ensures a unified approach to addressing debt trap	Policy development Platform
9.	Technology and information Securities	Information system and data security are fundamental for securely managing and sharing data among stakeholders, local businessman, Banks, etc.	Information system, data security measures, API’s

Table-2: Application Characteristics:

S.No	Characteristics	Description	Technology
1.	Data Security	Data security is an important aspect to protect sensitive financial and economic data	Encryption, secure authentication.
2.	Scalability	Scalable to handle large volume of data and users	Cloud computing, Distributed Systems
3.	Accessibility	Should be accessible from various platforms and devices	Web and mobile accessibility standards, Responsive Design

S.No	Characteristics	Description	Technology
4.	Real Time Analytics	Used for Immediate insights and decision making	Processing , real time data analytics tools
5.	Data visualization	To present complex financial and managerial data in a presentable format which can be understood to the user.	Python, data visualization libraries.
6	Cloud integration	Integration with cloud services for data storage and easy flow	Cloud API’s. cloud Storage
7	Data Governance	Making data governance policies for data quality and accessibility	Data Governance Frameworks, compliance tools