

**AXIOMATICS**

# **Dynamic Authorization: a game changer for Finance**

# Background

All financial institutions have multi-pronged data access control challenges, particularly when it comes to privacy and compliance. They must protect each consumer's privacy and confidential financial information while adhering to a growing number of global compliance regulations surrounding access control, segregation of duty, and the right to be forgotten. As a result, a growing number of institutions are implementing authorization solutions. That said, if authorization is not done right, it can lead to large financial and brand repercussions.

## Business Benefits of Dynamic Authorization

Authorization decisions are based on policies – not on individual roles. Policies can include any number of factors to describe the conditions in which a user should be granted access. Dynamic authorization delivers significant benefits to banks and other financial institutions, including controlled data access filtering and data masking.

It can address the most complex data access challenges for privacy, intellectual property (IP) protection, and secure sharing at the database layer to secure data at the source. It also extends the power of ABAC to protect data in databases/ datalakes all the way down to individual table cells, ensuring users only have access to the data they need and nothing more.

Further, dynamic authorization policies can be audited and certified to ensure access controls are properly configured. Without it, this information is often buried in application code or database structures.

Dynamic authorization gives financial institutions visibility into access control settings and provides the transparency required by auditors, security officers, data owners, regulators and customers.

### Why Axiomatics?

For more than ten years Axiomatics has provided dynamic authorization solutions to banks and financial institutions worldwide. We provide a policy and attributed-based approach to access control that can be used at multiple layers including databases, Big Data, applications, APIs and microservices.





## Online Payment Authorization

**Challenge:** International payment providers seek to reduce operational costs associated with transactions while also addressing audit concerns.

**Solution:** Using Axiomatics solutions as the authorization service to secure web services and APIs used in the payment application, they can increase the transaction speed. Approvals are automatically made if predetermined conditions are met.

**Result:** Audit preparation becomes easier as policies and decisions are made and managed centrally and are external to the applications.



## Delegation for special use cases

**Challenge:** A financial firm's role-based access strategy lacked the ability to assign permission for special and unique cases like financial audits, accessing personal financial records or loan management records.

**Solution:** To overcome this challenge, Axiomatics enabled the firm to deploy attribute based access control (ABAC) to establish fine grained permissions based on a variety of variables and attributes. This approach extended the roles used in existing business processes by adding a 'delegation' attribute which defines who the authority is delegated to, what they can access and for how long, specific purposes while still upholding business and regulatory policies regarding customer data.

**Result:** With the addition of the delegation attribute, the bank was able to implement a range of delegations based on unique use cases.



## Relationship Management

**Challenge:** There is potential for a conflict of interest between bank employees and their families, friends and neighbors who are customers at the institution. One bank's security strategy required relationships associated with the employee to determine whether that employee could access a customer's financial data regardless of the employee's role with the bank.

**Solution:** By working with the customer, the Axiomatics deployment team was able to define attributes that formed access policies which described the relationship in conflict with organizational policies and enabled the bank to enforce compliance rules.

**Result:** The bank was able to protect customer financial data from being shared with tellers who have a relationship with the customers, meeting compliance evidence for auditing purposes.

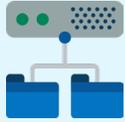


## Anomalous Behavior Detection and Response

**Challenge:** A large bank identified certain user behaviors as associated with fraud and wanted to detect these instances and terminate access to those users when these behaviors occurred.

**Solution:** Axiomatics implemented decision-making policies that described the behavior based on the variety of scenarios that had been identified and triggered a denial of access to the user once certain conditions were met.

**Result:** By implementing a more context-aware strategy, the bank was able to reduce financial losses associated with fraud and misuse. The bank was able to detect behaviors including excessive access to customer accounts so that once acceptable use was reached, the system would refuse further access to the individual.



## Data Sharing and regulation compliance

**Challenge:** Key to many banking and financial customers is the ongoing challenge of PII and enabling collaboration while complying with data protection and privacy regulations. It is critical that sharing or releasing customer data only take place under very strict and specific conditions.

**Solution:** Axiomatics provided policy-driven dynamic authorization solutions to control access to personally identifiable information (PII) and enable sensitive information masking (fine-grained data redaction).

**Result:** Axiomatics banking and finance customers were able to guarantee customer privacy, release customer data under strict need-to-share basis and ensure compliance with data protection regulations (including GDPR).



## Big Data Analysis

**Challenge:** A small, online bank needed to perform business analysis across different geographics to assist in defining new financial products for customers, something difficult to achieve without compromising compliance.

**Solution:** Externalized access policies were implemented to ensure consistent controls were applied regardless of which applications were used to request the data.

**Result:** Business intelligence and data could be accessed and located from different geo-locations. Sensitive data was de-identified while remaining discoverable, searchable and sortable.



## Separation of Duty

**Challenge:** An investment bank wanted to eliminate the risk of ‘rogue traders’ engaging in speculative trading without authorization.

**Solution:** Axiomatics provided a policy-driven dynamic authorization solution to help control access and approvals and reduce other behaviors indicative of speculation.

**Result:** Dynamic authorization helped the customer allow a trader to approve a transaction only if they did not initiate the transaction. The Axiomatics solution was also used to prevent SoD violations in case where the policy stated a trader could initiate a transaction for a client if they had not previously initiated a similar transaction in the last ten hours for a competing client.

## About Axiomatics

Axiomatics is the originator and leading provider of runtime, fine-grained authorization delivered with attribute-based access control (ABAC) for applications, data, APIs and microservices. The company’s Orchestrated Authorization strategy enables enterprises to effectively and efficiently connect Axiomatics’ award-winning authorization platform to critical security implementations, such as Zero Trust or identity-first security. The world’s largest enterprises and government agencies continually depend on Axiomatics’ award-winning authorization platform to share sensitive, valuable and regulated digital assets – but only to authorized users and in the right context.

To learn more, please visit our website or follow us on **LinkedIn**, **Twitter**, and **YouTube**.



**Learn more or request a demo of our solution:**

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