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# **Customer Identity Tools: Enhanced Customer Engagement**

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# ABSTRACT

Customer identity tools help modern enterprises provide a better customer experience by providing deeper insights into customer data. At the core of the Customer identity tool is Identity management, which helps in seamless authentication and compliance with regulations and policies. Other features like data integration and segmentation help the organization understand customers better and provide a personalized experience. This paper covers a comprehensive review of Customer Identity Tools.

Keywords: Customer identity, Customer identity tools, Identity Management (IdM), Customer Segmentation, Personalization, Microsoft Entra ID, Okta, Fronteg

#### **1. Introduction**

Customer identity refers to customer-related information/ data received from various sources. The data could include the customer's personal information, account details, and psychographic information. Organizations store and analyze customer data via customer identity tools.

Customer identity tools help the business manage customer data and provide analytics dashboards to understand customer needs, behaviors, and decision-making. This paper explores the various aspects of the customer identity tool, market review, and how this tool helps enhance customer engagement.

In the early days of commerce, the pre-digital era, customer identity was primarily established through face-to-face interactions. Businesses relied on personal relationships. Customer records were manually maintained with basic information. The Internet boom in the 1990s and the rise of social media in the 2010s allowed for deeper customer engagement, while big data analytics-enabled insights into preferences and behaviors. As data collection practices expanded, so did concerns over privacy and data security, which gave birth to regulatory authorities to protect customers' rights.

Today, customer identity management involves advanced technologies like artificial intelligence and machine learning.

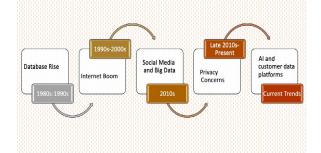


Figure 1: Customer Identity Historical Perspective

#### 2. Customer Identity Tools

Customer identity tools help businesses manage and understand their customers' identities, preferences, and behaviors. These tools enable organizations to create a comprehensive view of their customers, which can be used for personalized marketing, customer service, and enhancing user experiences.



Figure 2: Components of Customer Identity Tool

# 2.1. Identity Management

Identity Management (IdM) refers to solutions to manage and secure identities within an organization. It is a centralized storage of customer profiles. Identity management includes:

- Identity Provisioning Creating and managing user profiles.
- Authentication & Authorization Verify the identity and grant access based on the profile.
- Identity Federation Using a single set of credentials to access multiple systems.
- Identity Governance Compliance with regulations and policies regarding data access.

# 2.2 Data Collection and Integration

Data collection and integration help gather data from external, internal, structured, and unstructured sources and then transfer and map this data to create centralized storage.

Data integration provided the organization with a unified data platform, which helps in the following:

- Better data quality
- Improved data utilization
- Meaningful data insights

#### 2.3. Customer Segmentation

Customer segmentation is dividing customers into various segments to understand their needs better. Segmentation can be based on customer identity traits like demographics, psychographics, geographics, behavioral, Need-based, Social media, etc.

#### 2.4. Personalization

Personalization is tailoring the experience to customer needs and expectations. It is tied to Customer segmentation. Organizations can reach and re-reach customers by leveraging data and addressing their personal needs.

# 2.5. Analytics and Insights

Customer identity tools provide more profound and meaningful insight into customer journeys and pain points. They offer analytics dashboards to track consumer behavior and engagement metrics, facilitating strategic decision-making.

# 3. Market Review

There are many customer identity tools available in the market. The following table shows some of the popular tools and their capabilities:

	Microsoft Entra ID	Okta	Frontegg
Key Features	Single Sign-On (SSO)     Multi-Factor Authentication (MFA)     Conditional Access Policies     Integration with Microsoft     365 and other Microsoft     services     Identity Protection tools	Universal Directory for users.     SSO and MFA.     Lifecycle Management.     API Access Management.     Integration with thousands of applications.	<ul> <li>SSO and MFA.</li> <li>User management and roles</li> <li>Usage analytics and monitoring.</li> <li>Custom branding options.</li> <li>Easy integration with existing applications.</li> </ul>
Target User	Enterprises using Microsoft ecosystems	Mid-sized to large enterprises needing extensive app integrations.	SaaS developers and product teams.
Strength	<ul> <li>Deep integration with Microsoft products.</li> <li>Comprehensive security features.</li> <li>Scalability for large organizations.</li> </ul>	User-friendly interface.     Strong focus on integration and extensibility.     Robust API capabilities.	Developer-centric approach with easy implementation.     Customizable user experience     Focus on analytics for user engagement.

Figure 3: Customer Identity Tools Comparative Analysis

### 3.1. Key Take Aways

Microsoft Entra ID excels in environments heavily using Microsoft products, while Okta provides extensive integration capabilities across a wide range of applications.

Frontegg is more suited for developers looking for customizable solutions, with Frontegg focusing on SaaS applications.

Okta is noted for its user-friendly interfaces, which make it accessible to non-technical users.

All platforms offer robust security features, but Microsoft Entra ID and Okta lead in enterprise-level security solutions.

# 4. Enhancing Customer Engagement

Access to centralized data about the customer and technologies to gain deep insight helps organizations deliver better customer experience and gain brand loyalty.

#### 4.1. Personalization

These tools allow businesses to create personalized experiences by collecting and analyzing customer data. This means tailored content, product recommendations, and targeted marketing campaigns that resonate with individual preferences. Businesses can communicate more effectively with detailed insights into customer behavior and preferences. This includes sending relevant offers, reminders and updates that the customer will most likely appreciate. For instance, on movie streaming platforms like Netflix, providing recommendations based on the movies watched in the past is a more personalized experience and helps keep the customer engaged.

#### 4.2. Seamless Omnichannel experience

Customer identity tools allow the smooth transition from one channel to another, e.g., mobile to laptop. A seamless omnichannel experience helps the customer pick the interaction with zero impact on a different channel at the same place where he left off. For instance, the customer started applying on mobile but got distracted, logged in on a laptop, and completed the rest of the application.

This ensures that customers have a consistent experience whether they interact via website, app, or in-store, leading to increased satisfaction and loyalty.

#### 4.3. Improved Customer Insights & Better Decision Making

These tools provide valuable analytics on customer behavior, helping businesses understand trends and adjust strategies accordingly. This data-driven approach improves decisionmaking and proactive engagement strategies. For instance, feedback received from the customer(s) can be utilized to implement business strategies.

#### 5. Conclusion

In conclusion, customer identity tools serve as a foundation for enhancing customer engagement by facilitating personalized interactions, seamless experiences, and data-driven insights in enterprise-level secure solutions.

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