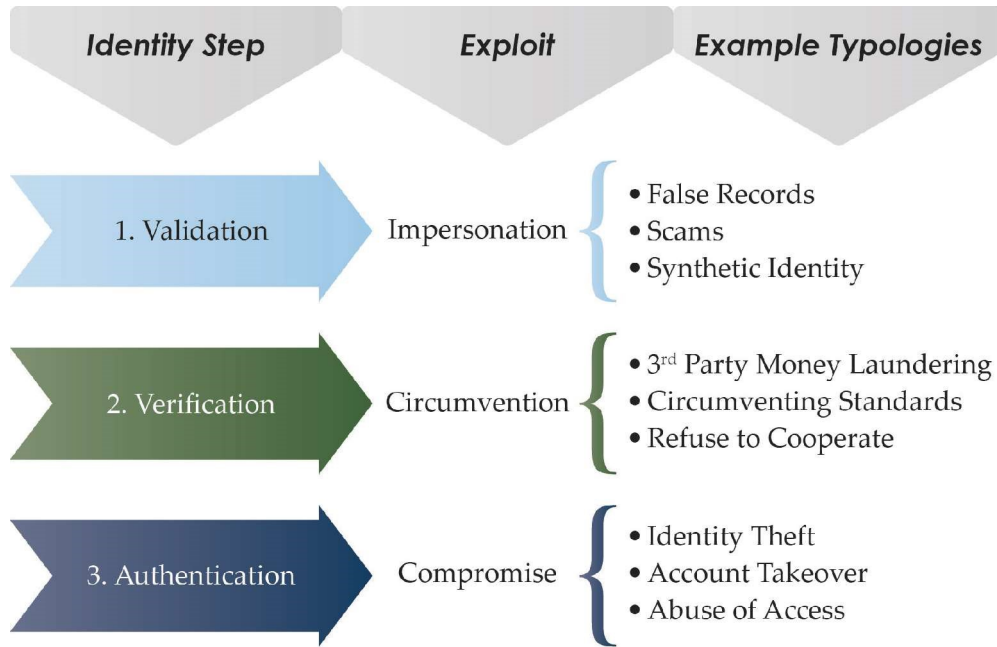


remote financial services may present additional openings for attackers to exploit breakdowns in identity processes.<sup>18</sup> Attackers target vulnerabilities in virtual and physical environments to steal sensitive information, compromise financial activity, and disrupt business operations.

**Figure 1. Identity-Related Exploitations and Typologies Attackers use to Undermine Identity Processes<sup>19</sup>**



For example, in the first identity step, validation, perpetrators of “False Records” exploit the validation step by altering, counterfeiting, or forging documentation, records, or forms of payment. Similarly, perpetrators of “Synthetic Identity” use a combination of real and fake PII to fabricate a person or entity to pass validation processes. During the second identity step, verification, bad actors attempt to circumvent verification by using the legitimate credentials of third-parties as straw men in “Third Party Money Laundering” or by using third-parties with lax standards (“Circumventing Standards”) or refusing to provide requested information (“Refuse to Cooperate”). During the authentication step, bad actors engage in an “Account Takeover” using stolen authenticators and credentials to gain full access to victim financial accounts. Bad actors who compromise the full PII details of victims (“Identity Theft”) create new account relationships such as loans or new accounts to defraud victims. Finally, trusted providers of goods and services misuse their authorized access (“Abuse of Access”) to data, information, or systems for financial gain (e.g., insider abuse, corruption, and embezzlement) thereby compromising the authentication step.

*Attackers Impersonate Others to Defraud Victims*

Attackers impersonate others by providing false identifying information, claiming to be other entities, and otherwise misrepresenting identity information to evade validation. Financial institutions and other victims appeared to have more difficulty identifying impersonation when they lack an