

**Deloitte Point of View on  
BOT Identity Management**

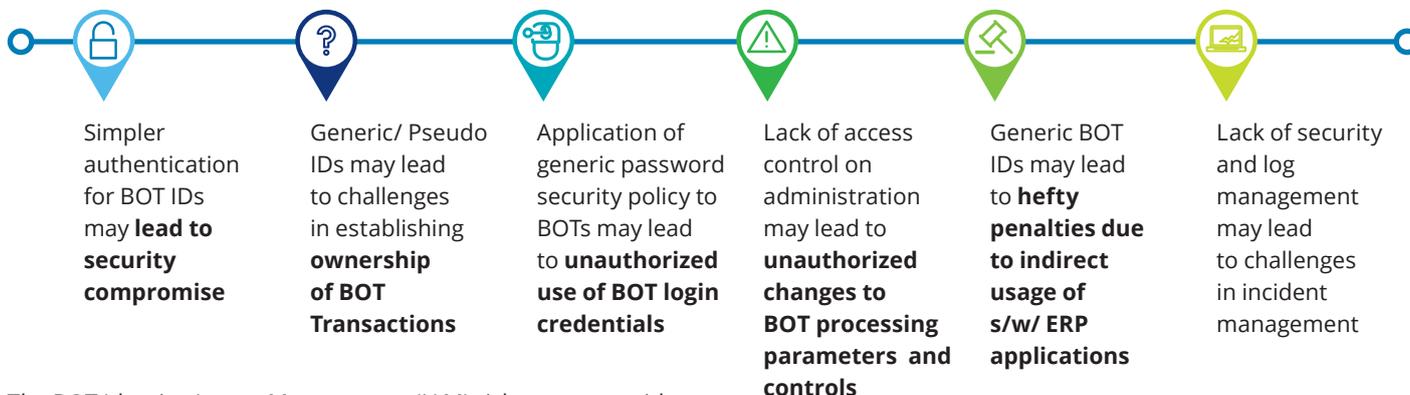
The Secured BOT Series

# BOT Identity: Secured. Optimized. Simplified.

Ro(BOT)tics Process Automation (RPA) has undoubtedly emerged as an enabler for efficient and error free operations. The technology is designed to enhance productivity, and is agile to enable multi-application data processing as well managing internal/ external system access. Incidentally it also opens doors for related cyber threats.



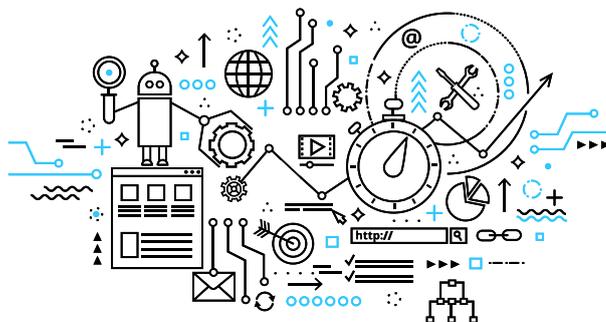
## Key risks to BOT Identity Management:



The BOT Identity Access Management (IAM) risks can vary with complexity, size of application environment and number of BOTs

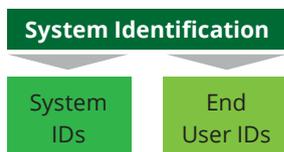
## RPA IAM over Traditional IAM

Deploying traditional IAM needs user and system IDs to be segregated (based on nature of access and transactions handled). However, RPA (BOT) IDs are system IDs and accesses applications like humans.

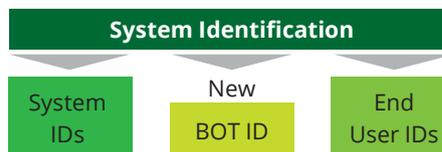


## We understand the challenges of IAM deployment in a BOT environment.

### Traditional Scenarios



### RPA scenarios

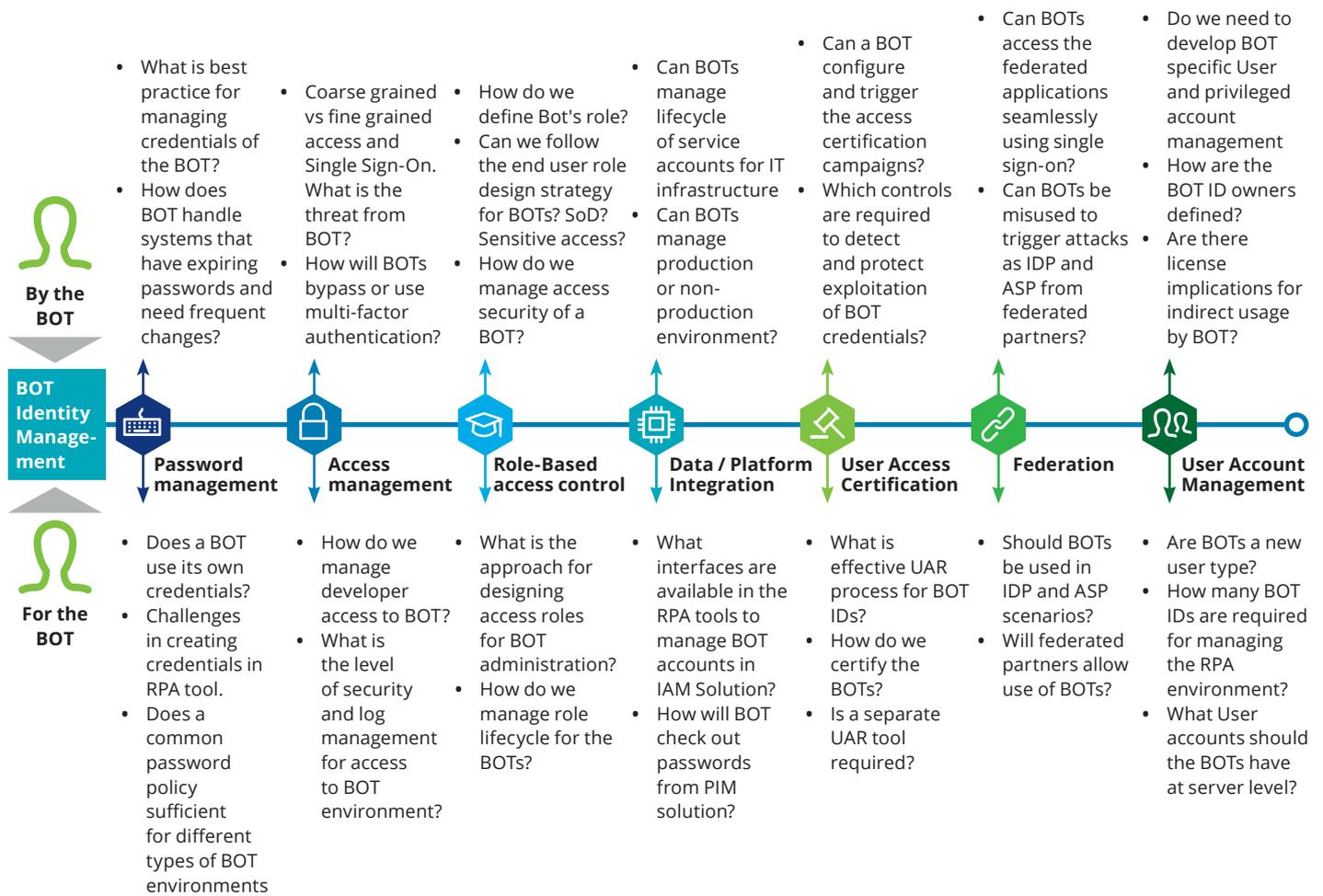


Accesses systems like Humans but operates as System IDs

<b>Authentication</b>	Single Sign on	One factor Single Sign-on is too risky. Consider API based just in time tokens or other mechanism for second factor. Special considerations for cases where biometrics for human interaction are mandated.
<b>SOD</b>	Segregation required to avoid conflict of interest	BOTs would not have conflicting interests, however two BOTs with SOD violation cannot be owned by one human.
<b>Fire Fighter</b>	BCM requirement, robust monitoring	Traditional fire fighting principals may not apply to organisations with 24x7 BOT world
<b>License Compliance</b>	As per pre defined License contract terms...	BOT have direct implications on indirect usage. Non-human interaction with application can void OEM warranty or violate terms of agreement.
<b>Audit trail</b>	Required for traceability	Redefine the purpose of Audit trail. Risk gets reformed with RPA and requires additional monitoring of BOT activity by SIEM systems
<b># ID</b>	One is to one ratio, with business roles	One ID to many BOTs? Or One ID per BOT? Both options have pros and cons and a collective assessment of above parameters would lead to the best choice.

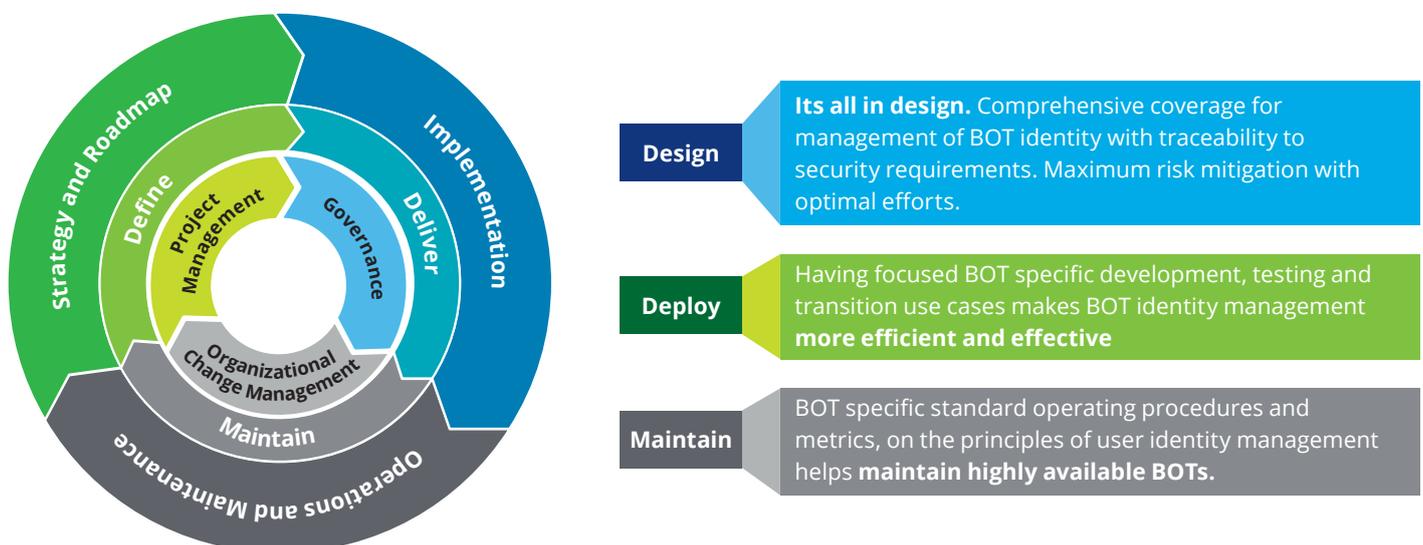
# How do we look at IAM for the BOT world?

Identity Management for BOTs needs to be addressed from two perspectives, "For The BOT" and "By The BOT". We leveraged our IAM Methods® methodology and aligned it to address RPA specific challenges. The seven components of Deloitte IAM Framework are further elaborated to address RPA risks and remediation requirements.



# How can we help?

Deloitte's RPA IAM methodology is designed to help you throughout the RPA journey. Our team of IAM experts would help secure the identity management 'of' and 'by' the BOT.



# Service Catalogue – Governance, Risk and Compliance solutions for RPA

Implementation Advisory	Secured BOT Assurance	Risk Management / Industry Solution	Managed Services
<ul style="list-style-type: none"><li>• BOT Security Architecture – Strategy, design and review</li><li>• Identity and access management</li><li>• Pre/ Post Go-live risk assessment</li><li>• Business Continuity Review</li><li>• Process standardization and mapping</li><li>• Program governance and strategy</li></ul>	<ul style="list-style-type: none"><li>• Secured BOT Assurance</li><li>• Process and Access Control Design and implementation</li><li>• Functional and non functional Testing</li><li>• Secured Code reviews</li><li>• Interface / API Security</li><li>• Vulnerability Assessment</li></ul>	<ul style="list-style-type: none"><li>• Compliance enablers (SoX, ICFR, IRDIA, TRAS, GST, ISO27001, PCI DSS etc.)</li><li>• Internal controls Monitoring</li><li>• Periodic Risk Assessment</li><li>• Regulatory reporting</li><li>• Application License Compliance</li><li>• Industry solutions</li></ul>	<ul style="list-style-type: none"><li>• Governance Strategy</li><li>• Center of Excellence</li><li>• Managed Cyber security operations center</li><li>• Incident management</li><li>• Change Management</li><li>• IT Process Automation</li></ul>

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