

◀ TOGGLENOW ▶[®]

WHITE PAPER

S.M.A.R.T

(Secure, Minimal, Aligned, Risk-Free, Task-Based)
Role Framework

A Holistic Approach to Role Design in SAP

A whitepaper by

DRISHTI NASHINE

Head - SAP S/4 Transformations, ToggleNow

RAGHU BODDU

Global CEO - ToggleNow | SAP Press Author | ERP Cybersecurity Authority

What's in?

Introduction	3
What is S.M.A.R.T	5
The Design Principle	9
Intuitive Solutions	10
ToggleNow's Difference	12
Next Step	13

Introduction

When were your authorizations last designed? Did you follow a structured framework?

Is your role design aligned with the 3-dimensional design, i.e., Task, Segregation of Duties, and optimized according to licensing requirements?



Introduction

Many organizations face challenges with SAP role design, often neglecting its importance in securing systems and maintaining operational efficiency. Research highlights that static or outdated role designs frequently fail to align with evolving compliance and business needs. This misalignment not only increases security risks, such as Segregation of Duties (SoD) violations, but also adds complexity to user access management and compliance reporting.

Poorly designed roles, such as overly generic or excessively complex roles, can lead to inefficiencies, making systems harder to maintain and audit. Organizations often lack regular reviews or updates to roles, further amplifying risks and operational costs. Addressing these gaps requires a strategic approach, including role simplification, alignment with business functions, and periodic reviews, to ensure agility and compliance with changing standards.

With growing regulatory/compliance requirements, increasing cybersecurity risks, and rising costs associated with software licensing, organizations must adopt smarter, more efficient approaches to role design.

S.M.A.R.T - a comprehensive framework designed by **ToggleNow** that ensures roles are designed with precision, compliance, and cost-efficiency in mind.

What is S.M.A.R.T model?

The S.M.A.R.T Model, designed by ToggleNow is a role design philosophy that addresses three critical aspects of access management:

Task Alignment

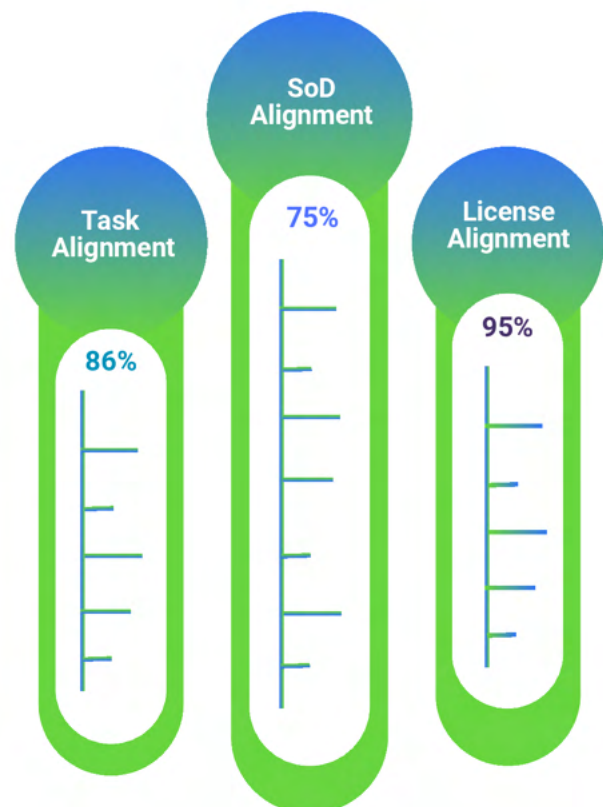
Ensuring that every role is tailored to the user's responsibilities, streamlining workflows and eliminating unnecessary access.

Segregation of Duties (SoD) Compliance

Embedding SoD principles into the design to prevent conflicts of interest, mitigate fraud risks, and meet regulatory requirements.

License Optimization

Designing roles to maximize the use of SAP licenses, ensuring cost-efficiency while adhering to contractual terms.



By balancing these three pillars, organizations can achieve a robust, scalable, and compliant role structure.

Why S.M.A.R.T model?

The S.M.A.R.T. Model is a role design philosophy that focuses on four essential aspects of access management:

**Enhanced
Security**

**Operational
Efficiency**

**Cost
Savings**

**Audit
Readiness**



7 out of 10 enterprises maintain the authorizations established during the SAP implementation.

You heard correctly! Many enterprises prioritize “Business As Usual (BAU)” activities while overlooking the significance of authorizations. Keep in mind that the threats and vulnerabilities have evolved significantly compared to a decade ago.

Enterprises allocate 3x as much funding towards operational activities.

Unbeknownst to many, enterprises often spend three times more on operational activities due to inadequately designed authorization structures. Research indicates that a well-structured authorization framework significantly minimizes the necessity for frequent modifications and reduces the demand for support resources.

Redesigning authorizations should be viewed as an investment rather than an expense

In numerous cases, businesses perceive the redesign of authorizations as a cost; however, it should be viewed as an investment. Redesigning not only eliminates Segregation of Duties and associated risks but also aligns your authorizations with SAP’s licensing requirements.

Most importantly, an authorization design that follows the S.M.A.R.T. methodology will ensure you are “Audit Ready.”

A billion-dollar brain teaser!

When should a redesign be considered: during ECC or after transitioning to S/4 HANA?

A frequently asked question by many of our clients! The response varies based on several factors, including custom transaction codes, SU24 updates, obsolete transaction codes, legacy authorizations, and more. Without the insights of Subject Matter Experts, it may not be advisable to recommend this approach.



The design principle..

Roles, whether in ECC or S4 HANA, should be crafted according to the appropriate design principles, and this is exactly what SMART embodies.

01

Task Mapping

Identify the task-level derivations based on the current business functions.

02

SoD Analysis

Identify the segregation of duties along with the critical risks involved, as well as the methods for addressing those risks.

03

License Profiling

Review the current license inventory and adjust the design to ensure that roles align with the lowest licensing category.

04

Iterative Refinement

Leverage feedback from users, auditors, and system administrators to refine the role design. The S.M.A.R.T Model thrives on adaptability and continuous improvement.

Let's take a closer look.

As previously stated, effective role design should align with the S.M.A.R.T design. Below is an example illustrating the design of a process-specific role at the task level, i.e., Internal Order with Maintain authorization:

Role Name	ZM_CO_IO_INT_ORDER_MNT_XXXX
Role Description	Master Role - Controlling: Internal Order Maintain
Transaction Code	Code Description
KON1	Actual Reval: Int.Orders Ind.Pro.
KOK6	Collect. Printing of Internal Orders
KOB7	Orders: Line Item Settlement Retirem
KO26	Change Order Return
KO12	Change Order Plan (Overall, Year)
KO04	Order Manager
KO02	Change Order
KO01	Create Internal Order
KOH2	Change Order Group
KOH1	Create Order Group

Task – Internal Order Maintain

SoD Free Transaction codes

License evaluated at permission (authorization object) level

The role also includes transaction codes that are free from Segregation of Duties (SoDs) and are in accordance with licensing requirements.

Enhance it using automated tools.

ToggleNow's Intuitive Solutions

ToggleNow employs a range of proprietary tools to pinpoint Segregation of Duties and enhance role design in accordance with STAR (S/4HANA Trusted Authorization Review) licensing recommendations.

For instance, in the initial step, we ensure that the role corresponds to a specific business task and confirm the classification as illustrated below:

Role Validation Results					
Role	Short Role Description	Target Classification	Ratio	Objects	Users
ZM_CO_IO_INT_ORDER_MNT_XXXX	Master Role - CO: Internal Order Maintain	HB Professional	1/4	41	1

The next step involves a more in-depth analysis to identify classifications based on the maintained authorizations (activities).

Details for Role ZM_CO_IO_INT_ORDER_MNT_XXXX								
Object	Text	Field name	Description	Value Low	Description	Value High	Description	Classif.
K_AUFK_ART	CO-OPA: Order Types	ACTVT	Activity	01	Add or Create			HD Productivity
			Activity	02	Change			HD Productivity
K_AUFK_SET	CO-OPA: Order Groups	ACTVT	Activity	02	Change			HB Professional
K_VRGNG	CO: Bus. Trans., Actual Postings and Plan/act. Allocations	ACTVT	Activity	02	Change			HC Functional

Once the necessary adjustments are identified, the role will be aligned with the appropriate licensing category. For instance, removing activity 02 for the authorization object K_AUFK_SET reclassifies the role under the "Functional" category. If this authorization can be entirely removed or restricted to a subset of users, most users can be categorized as Functional rather than Professional. The role becomes a Functional role and when assigned to users, they are classified in the Functional category.

Avoid becoming ensnared in the "Stock Ready" role design commonly offered by numerous providers. Such roles are typically not tailored to specific business needs and tend to be overly generic. While they may appear cost-effective at first glance, they often lead to increased operational and licensing expenses in the long run.



With years of expertise in SAP Security, GRC, and role redesign projects, ToggleNow has successfully assisted global enterprises in transforming their access management strategies. Our team specializes in:

Comprehensive Role Redesign Projects: We assess existing role structures, identify inefficiencies, and implement task-aligned, SoD-compliant, and license-optimized roles tailored to your organization's needs.

GRC Expertise: Leveraging leading tools and methodologies, we help enterprises detect, mitigate, and eliminate SoD conflicts while ensuring regulatory compliance. For enterprises who doesn't have SAP GRC, we use our proprietary solutions such as Verity, Optimus and so on.

License Optimization Solutions: Our proven strategies ensure you get the most out of your SAP licenses, saving costs without compromising operational efficiency.

Ready to transform your SAP role management?

Contact ToggleNow today and take the first step towards a smarter, more secure future.

Custom Tools and Accelerators: We utilize innovative tools that simplify role design and validation processes, reducing project timelines and enhancing results.

By partnering with ToggleNow, enterprises can implement the S.M.A.R.T Role Model with confidence, ensuring robust access controls, seamless compliance, and significant cost savings. Whether you're embarking on a role redesign project for the first time or seeking to refine your existing structure, ToggleNow's proven expertise will guide you every step of the way.



ToggleNow difference

The S.M.A.R.T Role Model is not just a design framework—it's a game-changer for enterprises striving for secure, efficient, and cost-effective role management in SAP. However, implementing such a comprehensive model requires a blend of technical expertise, business acumen, and real-world experience in managing SAP landscapes.

100+

Projects Delivered in
ECC, S4, and Rise
with SAP

80+

S.M.A.R.T SMEs with
vast experience

40%

Approx Savings on
Licensing &
Operational Costs



Contact

Let's Get to Work Together

Collaboration drives success, and together, we can achieve extraordinary results. By leveraging our expertise and aligning it with your unique goals, we aim to deliver innovative solutions that empower your business. Whether it's optimizing processes, implementing cutting-edge technology, or driving growth through strategic initiatives, we are committed to making a lasting impact. Let's join forces to turn challenges into opportunities and ideas into actionable outcomes. Together, we can shape a brighter, more successful future.

**Drishti
Nashine**

Email

drishti@togglenow.com

**Raghu
Boddu**

Email

rb@togglenow.com

Website

www.togglenow.com

**THANK
YOU!**