



UNIVERSITY  
*of* VIRGINIA

**Board of Visitors**  
**Audit, Compliance, and Risk Committee**  
**September 2019**

# Assure, Advise, Anticipate: The Role of Internal Auditing in Good Governance and Organizational Success

Internal audit contributes to success, positive change, and innovation by delivering assurance, insight, and advice

# Internal Audit 1.0

## The Olden Days



# Internal Audit 2.0

## Focus on Risks

# The Institute of Internal Auditors' Point of View: How Internal Audit Contributes

How does  
internal audit  
benefit an  
organization?

## Pillar 3:

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**Internal audit contributes to success, positive change, and innovation by delivering assurance, insight, and advice.**

- 3.1** By delivering insights on governance, risk, and control, internal audit provides a robust challenge to organizational practices and provokes positive change and innovation.
- 3.2** Internal audit is best able to provide insight and advice when it combines independence and objectivity with a deep understanding of the organization, its governance, and its operating environment, and by drawing on the power of data.
- 3.3** Internal audit encourages innovative thinking by maintaining an active awareness of developments in the profession and adopting leading-edge practices.
- 3.4** Through the provision of assurance on the effectiveness of governance, risk, and control, internal audit inspires organizational confidence and enables competent decision making.



UVA's Audit plan is

- Agile
- Risk-prioritized
- Coordinated with other assurance activities
- Focused on UVA's key objectives

# UVA's Risk-Based Approach to Internal Auditing



# Internal Audit 3.0

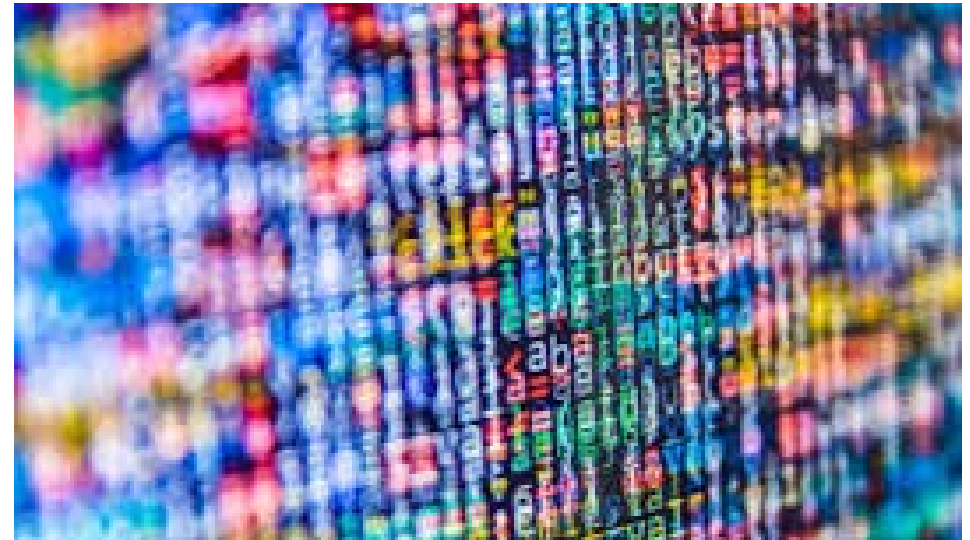
## Let's Get Digital



# Advancing UVA Audit's Use of Analytics

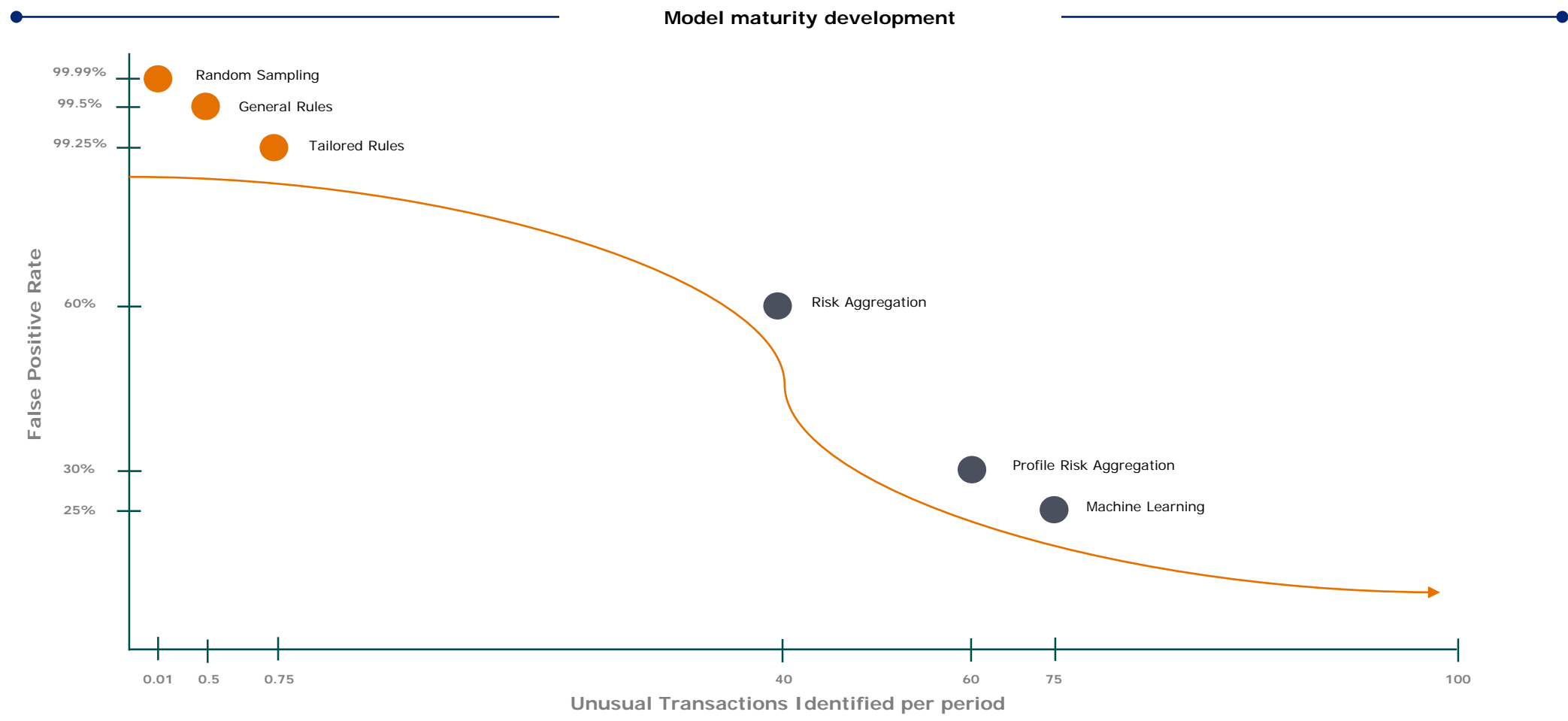
Internal audit teams, agnostic of industry or geography, must move toward real-time assurance, **enabled by data analytics**, to keep up with the growing number and magnitude of risks all enterprises face.

In August we held a Data Analytics Greenhouse, facilitated by Deloitte, to begin crafting a new approach to harnessing the power of data throughout the audit process.



# Advanced analytics provide better risk coverage, higher accuracy, and speed

It's imperative we move from traditional audit sampling techniques to higher levels of full population analysis to remain relevant to today's data rich environment.



# Internal Audit 3.0: *Let's Get Digital*

## UVA Audit's Vision:

To be an indispensable partner to UVA's senior leaders and the Board of Visitors by providing data driven, objective advice and assurance on the most consequential risks to achievement of the University's objectives.

## Recommended UVA Initiatives



Based on what we have heard, we have begun to identify a number of recommended opportunities to address UVA's data analytics challenges



### Process & Methodology

8. Update the IA methodology to include considerations for data analytics and provides guidance to the Analytics team to control the consistency and quality of work products.
9. Develop planning and audit execution aids, including analytics project intake forms, data mapping requirements, analytics and project management objectives (consider Cross-industry Standard Process for Data Mining as a framework) to support and enhance decision making throughout the audit lifecycle
10. Identify and track KPIs around analytics, including time and effort of team resources, # analytics audits, training hours delivered, analytics observations, impact, etc.



### Data and Tools

11. Identify priority systems and/or common datasets.
12. Identify key data and technology relationships across UVA where IA can effectively partner
13. Prioritize and heat map key data environments by process and sub-process and/or audit area of focus
14. Secure an appropriate data environment for all auditors to utilize
15. Select appropriate tools (based on enterprise technologies, availability of training, and cost) to utilize for data prep, modelling and visualizations.
16. Assess the need to have a minimum baseline of systems knowledge for all auditors e.g. Oracle EBS, WorkDay, etc.



### Talent & Operating Model

4. Develop RACI matrix (Responsible, Accountable, Consulted and Informed) to document responsibilities of both auditors and analytics resources, consider the current group structure versus functional and technical skills requirements on audits, evaluating the current org. structure to match DA team's skills to the needs of the audit engagement.
5. Develop analytics competency model to document analytics capability expectations of both auditors and analytics resources.
6. Resource plan for analytics and traditional auditors, update job descriptions considering data literacy and technical skills sets, and any open needs
7. Develop a training curriculum, including both technical and soft skills, for auditors, DA team members, and DA champions to address gaps in the competency model.



### Change Management & Vision

1. Develop a project plan including resource allocation, change management, communication, and detailed timeline for achieving defined future state
2. Complete and communicate the vision for analytics with IA team members, business and key stakeholders, consider stakeholders across UVA where IA can influence direction of tools and technology to further the objectives of IA, e.g. EDW, Analytical Tools, Technology, etc.
3. Training aligned to methodology with real-life analytics use cases will form the backbone of the change management strategy for the auditors, the curriculum should flex to incorporate data sources, key applications e.g. EPIC & Oracle, while addressing the technical needs for analytics and the data literacy needs of the auditors

- Update on the FY2020 Audit Plan
- Activities Since June Meeting

## Office of Audit and Compliance

## Questions for the Committee's Consideration



- How would Committee members like to receive information on risks and risk mitigation effectiveness?
- Do Committee members feel well informed on the Audit Department's purpose, objectives, and scope?
- How does the Audit Department's work add value to UVA?

Risk and  
Ownership of  
Academic  
Division,  
Health  
System, and  
UVA Wise  
Risks

# Enterprise Risk Management

# ERM Key Risks and Ownership May 2019

Academic Division Risk	Risk	Lead	Executive Owner	BOV Committee
<b>ADVANCEMENT</b> - Developing and implementing campaign strategy that adequately addresses philanthropic investment, fundraising strategies, and the governance implications of the resulting distribution of resources	Mark Luellen		President	Advancement
<b>COMPETITIVE ENVIRONMENT</b> - Assessing the University's competitive space in undergraduate, graduate, and professional programs	Archie Holmes		EVP-Provost	Academic and Student Life
<b>FACULTY</b> - Attracting, retaining, and developing a distinguishing faculty	Maite Brandt-Pearce		EVP-Provost	Finance, Academic and Student Life
<b>INVESTMENTS</b> - Stewarding assets particularly related to investable assets	Melody Bianchetto		EVP-COO	Finance
<b>IT SECURITY</b> - Enhancing cybersecurity in an era of increasing threats	Virginia Evans		EVP-COO	Finance
<b>LEADERSHIP TRANSITION</b> - Accomplishment of ongoing mission and major objectives during a season of executive leadership transitions and new strategic directions	Margaret Grundy		President	Executive
<b>RESEARCH</b> - Leadership, infrastructure, and funding to adequately support the accomplishment of our research objectives	Ram Ramasubramanian		EVP-Provost	Academic & Student Life
<b>RESOURCES</b> - Diminished, or loss of, financial resources from major funding sources (e.g., State, Advancement, Research, Endowment)	Melody Bianchetto		EVP-COO	Finance
<b>SAFETY</b> - Maintaining a safe environment for the University community	Gloria Graham		EVP-COO, VP for Student Affairs	Academic and Student Life
<b>STATE</b> - Concern about whether public policy in the State will continue to be supportive of quality public higher education	Colette Sheehy		President	Finance

# ERM Key Risks and Ownership May 2019

Health System Risk	Risk Lead(s)	Executive Owner	BOV Committee
<b>FACULTY PRODUCTIVITY</b> – Optimizing faculty productivity and corresponding support for clinical, academic, and administrative efforts	A. Bobby Chhabra Chris Ghaemmaghami David Wilkes	EVP-Health Affairs	Health System Board
<b>IT SECURITY AND GOVERNANCE</b> – Enhancing cybersecurity and data governance in an era of increasing threats and expansion of clinical data uses	Tracey Hoke Robin Parkin	EVP-Health Affairs	Health System Board
<b>QUALITY &amp; SAFETY</b> – A major quality or safety event; maintaining Joint Commission accreditation	Tracey Hoke	EVP-Health Affairs	Health System Board
<b>REIMBURSEMENT REFORM</b> – Reduced Medical Center revenues as a result of payer reform	Pamela Sutton-Wallace	EVP-Health Affairs	Health System Board
<b>RESEARCH</b> – Supporting the accomplishment of our research objectives by providing adequate research leadership, infrastructure, and funding	David Wilkes	EVP-Health Affairs	Health System Board
<b>STRATEGY</b> – New strategic direction and alignment of Health System entities in a changing competitive environment; maximizing off-grounds partnerships	A. Bobby Chhabra Pamela Sutton-Wallace David Wilkes	EVP-Health Affairs	Health System Board
<b>TALENT MANAGEMENT</b> - Recruitment and retention of key personnel (patient care services positions, research, and leadership)	A. Bobby Chhabra Pamela Sutton-Wallace David Wilkes	EVP-Health Affairs	Health System Board





# ERM Key Risks and Ownership May 2019

UVA-Wise Risk	Risk Lead(s)	Executive Owner	BOV Committee
<b>Alignment of Purpose with Programs and Support Services</b> - Ensuring the identity, structure, and curriculum of the College are optimized to best serve students and other key stakeholders	Associate Provost	Provost	Wise Committee
<b>Campus Culture</b> - Leveraging the College's rich history to enable the vision and changes necessary to create an environment for future success and growth	Chancellor's Chief of Staff	Chancellor	Wise Committee
<b>Competitive Environment</b> - Positioning the College to attract and retain the best students in a dynamic and increasingly competitive market of higher education	Associate Director Admissions	Vice Chancellor for Enrollment Management	Wise Committee
<b>Faculty and Staff</b> - Attracting, developing, and retaining highly qualified faculty and staff	Provost, Chief Operating Officer	Chancellor	Wise Committee
<b>Local Community Relations</b> - Proactive services for and collaboration with Wise area residents, businesses, and organizations promoting the benefits of integration with these "co-owners" and stakeholders	Vice Chancellor for Economic Development	Chancellor	Wise Committee
<b>Marketing and Communications</b> - An enhanced and coordinated effort to clearly communicate the value and opportunities of the College to external and internal audiences	Marketing Director	Chancellor	Wise Committee
<b>Regional Area</b> - Adapting and responding to the effects of changing demographics and helping to lead and enable the economic response to those changes	Innovation Center Manager	Vice Chancellor for Economic Development	Wise Committee
<b>Relationship with UVA</b> - Further defining and leveraging this historical partnership to maximize the benefits for both institutions	Provost	Chancellor	Wise Committee
<b>Resources and Stewardship</b> - Oversight of major funding sources (tuition, state, advancement, endowment) including revenue streams, budget process/decisions, and ongoing asset maintenance	Budget Director	Chief Operating Officer	Wise Committee
<b>Student Centric Focus</b> - Strategy for the recruitment, admission, and retention of a motivated and diverse student body resulting in placement ready graduates and ongoing alumni engagement	Vice Chancellor for Student Affairs	Chancellor	Wise Committee