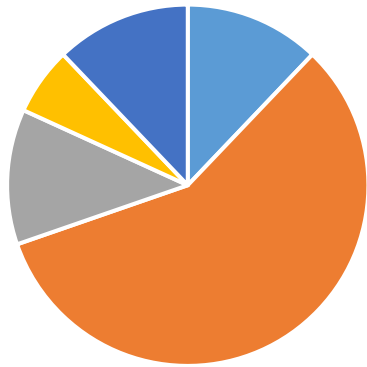


## Number of respondents to questionnaire

<b>Total questionnaires sent</b>	<b>173</b>	<b>100%</b>	
Non respondents	140	81%	
<b>Total respondents</b>	<b>33</b>	<b>19%</b>	33
Asia-Pacific	4	2%	12%
Europe	19	11%	58%
Latina America	4	2%	12%
Middle East-Africa	2	1%	6%
North America	4	2%	12%

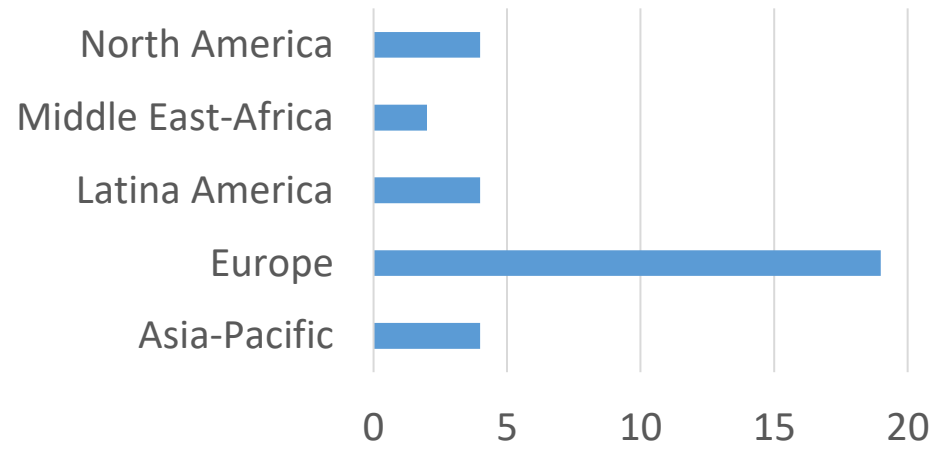


Respondents only



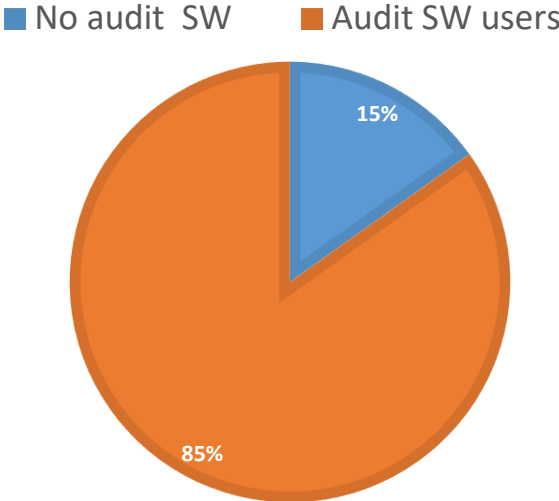
- Asia-Pacific
- Europe
- Latina America
- Middle East-Africa
- North America
- 

Respondents only



# 1. Audit approach

1.A Do you use any software audit?  
(How many GGI members, who replied, adopt audit software)



No audit SW	5	15%
Audit SW users	28	85%
Total respondents	33	100%



# 1. Audit approach

## 1.B Which audit phase is managed by software:

- Internal system/management quality control procedures (independence, acceptance and retention, AML-anti money laundering, time reporting, work in progress monitor, second partner or external or quality reviews, team evaluation)
- Evaluation of internal controls and risk assessment
- Substantive procedures
- Closing procedures

## 1.C Does audit software integrate all audit phases?

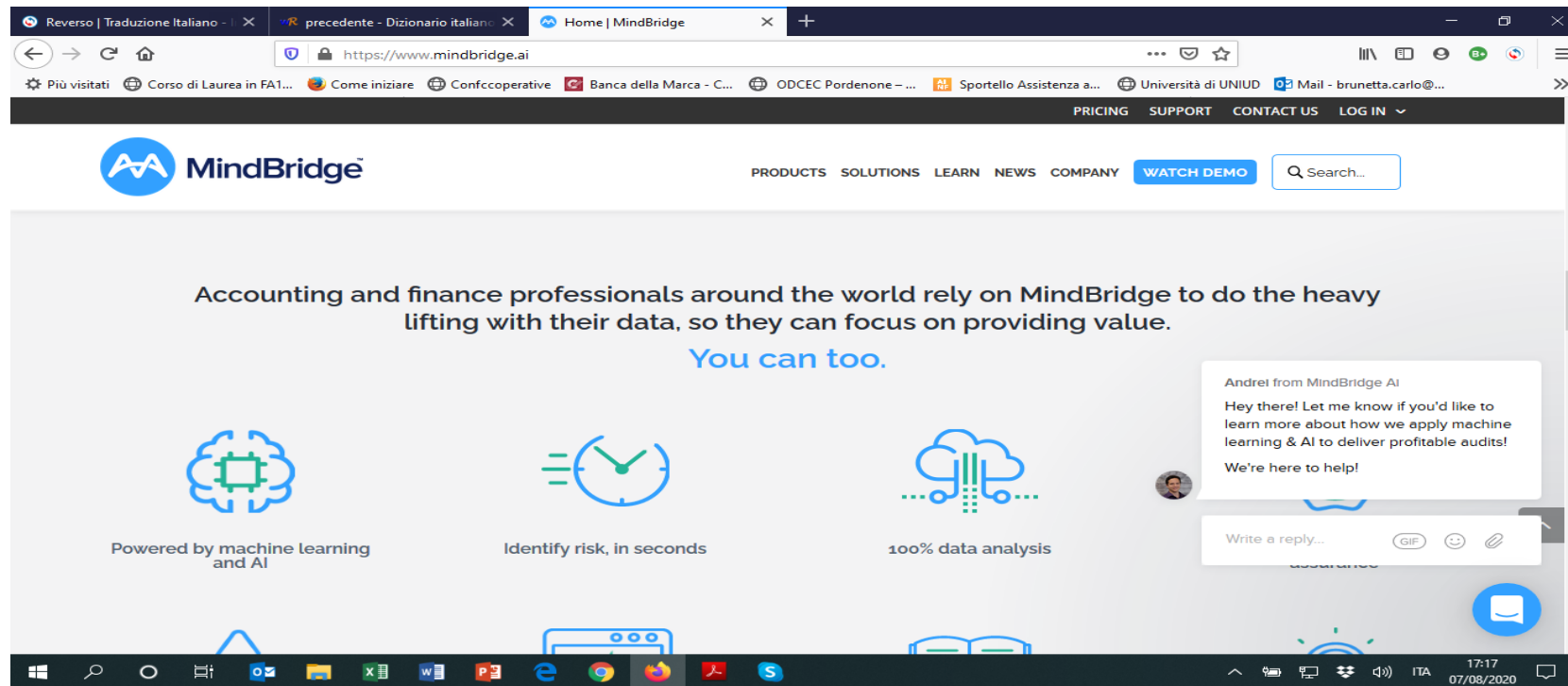
Only quality control	2	7%
Only quality and substantive test	2	7%
Other phases but <b>no quality</b>	7	25%
All phases sw (integrated)	17	61%
	28	100%



# 1. Audit approach

## 1.G Do you use any AI (Artificial Intelligence) technology or software as well? Can you illustrate or exemplify it? Is it integrated into the audit software?

AI tools generally not used and not exactly known (see examples in next slide) with the exception of Mr. Aditya of Ashwani & Associates (India). They have identified Mindbridge.ai to be used going forward.



# 1. Audit approach

## ML: Machine Learning – NLP: Natural Language Process

**Figure 1—Audit Procedures Comparison With and Without AI Technologies**

Phase	Procedures Without AI	Procedures With AI	Types of Technology	Impact of AI on Accomplishing Phase Tasks
Planning	<p>The auditor:</p> <ul style="list-style-type: none"> <li>• Learns industry and business environment through meetings with client management and review of BoD meeting minutes</li> <li>• Examines client's enterprise to estimate a level of risk</li> </ul>	<p>The AI computer performs the following tasks:</p> <ul style="list-style-type: none"> <li>• Produces risk assessment based on prior-year documents, business environment and industry trends for auditor's review</li> <li>• Records, summarizes and produces meeting minutes</li> </ul>	<ul style="list-style-type: none"> <li>• NLP</li> <li>• ML</li> <li>• Voice recognition</li> </ul>	Moderate impact
Evaluation of internal controls	<p>The auditor:</p> <ul style="list-style-type: none"> <li>• Reviews internal controls, policies and procedures</li> <li>• Interviews process owners and records details for workpapers</li> <li>• Performs operational test of controls by observing employees, reperforming processes and inspecting documents</li> </ul>	<p>The AI computer performs the following tasks:</p> <ul style="list-style-type: none"> <li>• Prepares workpaper references, including flowcharts and risk/control matrices, from recorded interview information</li> <li>• Analyzes screen captures of computer processes and flags those that are questionable and needing additional review</li> <li>• Digitally inspects documents, looking for adequate approvals</li> </ul>	<ul style="list-style-type: none"> <li>• Voice recognition</li> <li>• NLP</li> <li>• ML</li> </ul>	High impact
Substantive procedures	<p>The auditor:</p> <ul style="list-style-type: none"> <li>• Manually observes inventory count</li> <li>• Sends and manages confirmation requests</li> <li>• Inspects supporting documents of sales orders and cash receipts</li> <li>• Reviews select journal entries that fit circumstances that may reflect fraud</li> <li>• Analytically compares auditor's estimates and industry averages of sales and other metrics to actual enterprise performance</li> </ul>	<p>The auditor leverages the following technologies:</p> <ul style="list-style-type: none"> <li>• Digital/mobile applications, barcodes and QR codes, and drones assisting in inventory counts</li> <li>• Encrypted online platform, accessed by both auditors and customers, to manage confirmation requests</li> </ul> <p>The AI computer performs the following tasks:</p> <ul style="list-style-type: none"> <li>• Imports and automatically reconciles cash receipts and sales orders while comparing for discrepancies</li> <li>• Flags all transactions that are potential fraud cases</li> <li>• Creates estimation of sales and other metrics based on industry and competitor data</li> </ul>	<ul style="list-style-type: none"> <li>• NLP</li> <li>• Voice recognition</li> <li>• Drones</li> <li>• ML</li> <li>• Encryption</li> <li>• Internet of Things (IoT)</li> </ul>	High impact
Closing procedures	<p>The auditor:</p> <ul style="list-style-type: none"> <li>• Compiles audit findings and issues</li> <li>• Uses professional judgment to evaluate impact of findings</li> <li>• Forms categorical opinion</li> <li>• Writes audit report using the formatting provided by audit standards</li> </ul>	<p>The AI computer performs the following tasks:</p> <ul style="list-style-type: none"> <li>• Formulates an audit score based on client's risk, audit findings and their effects to evaluate audit risk</li> <li>• Forms opinion based on continuous-number grading scale</li> <li>• Drafts audit report based on audit score and formulated opinion</li> </ul>	<ul style="list-style-type: none"> <li>• NLP</li> <li>• ML</li> </ul>	Low to moderate impact

# 1. Audit approach

## 1.H Do you manage also data analytics with your audit software?

YES	11	33%
NO	19	58%
NO ANSWER	3	9%
	33	100%



## 2. Compliance

### 2.A Have you verified the compliance with international and/or local standards of audit?

YES	24	86%
NO	4	14%
Total	28	100%

### 2.B Does audit software use statistical sampling? Have you been satisfied about the compliance of used algorithms?

YES	13	46%
NO	15	54%
Total	28	100%

Not using statistical sampling increase the risk of no compliance with ISA or Standards of Audit.

This is another case of inconsistency between 24 members declaring compliance and only 12 members using statistical sampling. Find in next slide name of members giving inconsistent answer, may be they can explain.

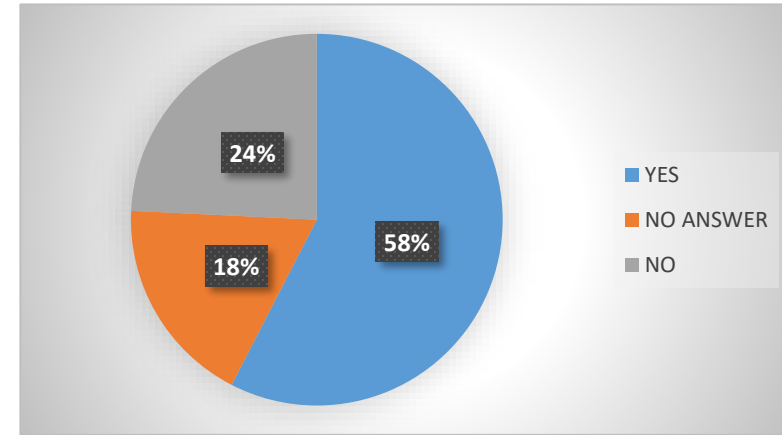




### 3. Flexibility

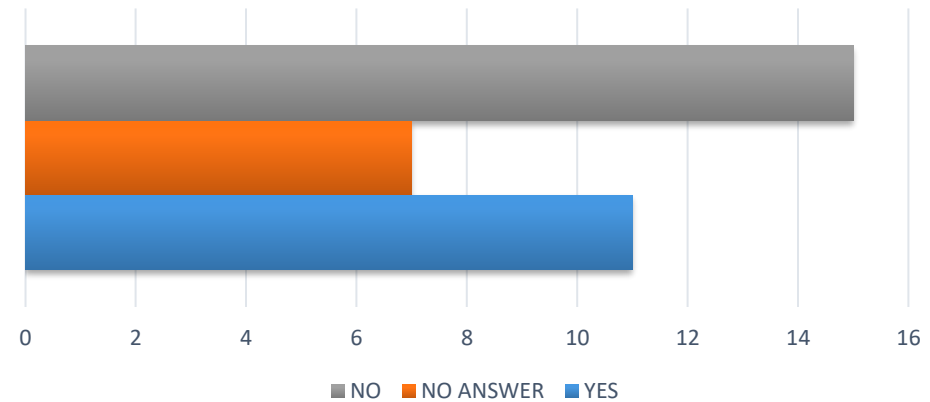
#### 3.A Presence of tools and structures to audit companies of different sectors?

NO ANSWER	6	18%
NO	8	24%
YES	19	58%
	33	100%



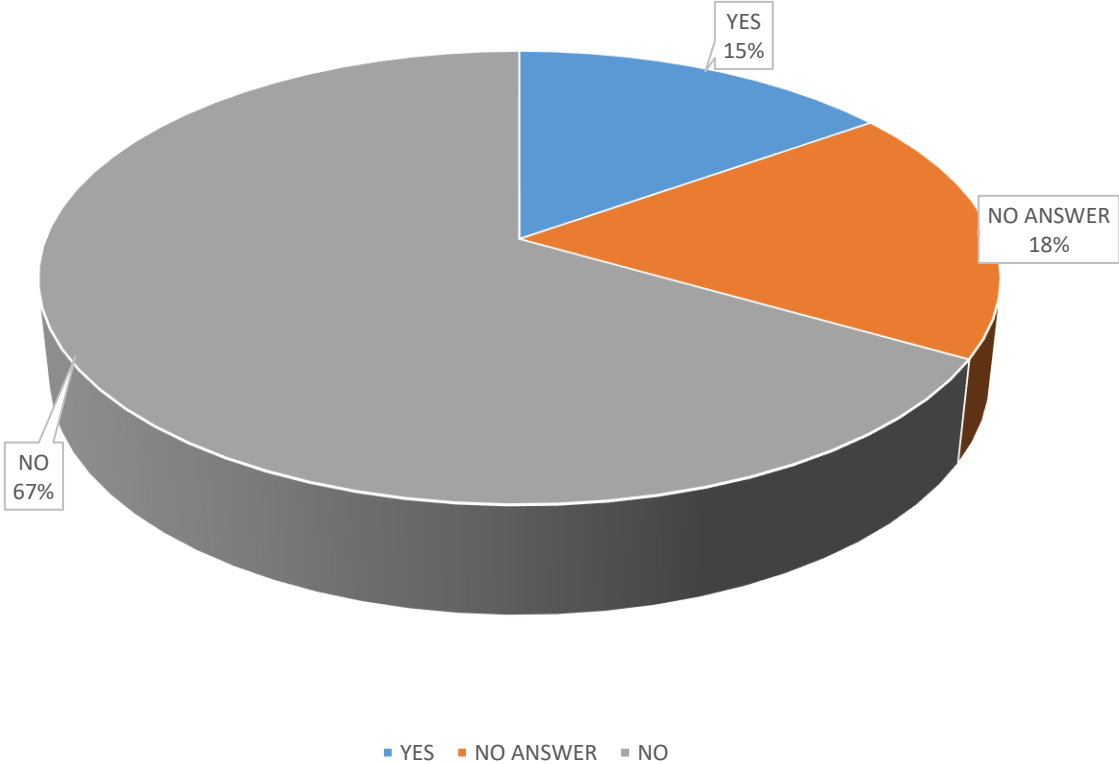
#### 3.B Software used to share information in case of referral works or consolidation reporting package purpose?

YES	11	33%
NO ANSWER	7	21%
NO	15	45%
	33	100%



### 3. Flexibility

#### 3.C can the software manage different languages?



## 6. Name, costs and service level

### 6.C Can you give us the NAME of the SOFTWARE in use AND the name of the COMPANY producing it?

software name (producer holding company's country) and number of GGI members utilizing software		users' amount	notes
CaseWare (Canada)	6	150	
CaseWare combined with other sw	4	163	2 members didn't disclose users' amount
CCH by Wolters Kluwer (The Netherlands)	5	454+	
ASD Auditor (Spain)	2	9	
IRIS and Myworkpapers (UK)	1	500+	
Datev (Germany)	1	8	
Auditsoft by Francis Lefebvres (Spain)	1	6	
Open dot com (Italy)	1	3	
Studioprof by Aerials Software (Italy)	1	11	
Hogia Audit (Sverige)	1	16	
Thomson Reuters AdvanceFlow and Checkpoint Engage (Canada)	1	4	
Arbutus (Canada)	1		users' amount not disclosed
Name not disclosed	2		users' amount not disclosed
Dropbox and Excel	1		users' amount not disclosed
	28	1.324	



## BEST IN CLASS

Here find 17 GGI members that use software for all audit phases and the phases are connected

#	Name of Person Filling Out the Questionnaire	Firm/Company Name	Country
1	Walter Lian	Citroen Wells	UK
2	Andy Jones	Haines Watts	UK
3	Boris Michels	Nbs partners	Germany
4	R. Frank	Prager Metis	USA
5	Geoffrey King	Barbich Hooper King Dill Hoffman A/C	USA
6	Sérgio Pontes	Pontes, Baptista & Associados SROC	Portugal
7	Andreas Gottmann	Fact GmbH WP-Ges	Germany
8	Ayman Othman	Associated Accountants	Saudi Arabia
9	Knut Einar Rishovd	Revisjonsfirmaet Flattum & Co AS	Norway
10	Roland Ogink	de Jong & Laan	Netherlands
11	Jakoby, Brigitte	Jakoby Dr. Baumhof	Germany
12	Carole Tran	Fidag	France
13	Anthony Hobson	Nolands Group South Africa	South Africa
14	Andrea van der Giezen	JAN© Auditors & Tax advisers	Netherlands
15	Jean Marc Vin	Expertisa	Brazil
16	Fredrik Dellström	Stromson Revisionsbyrå	Sverige
17	Mike Mantelli	Mantelli & asociados	Argentina

Rebis

