



WP5-A9. Final international seminar in Aschaffenburg (Germany).



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/)

"Funded by the European Union. However, the views and opinions expressed are solely those of the authors and do not necessarily reflect those of the European Union or the Education, Audiovisual and Culture Executive Agency (EACEA). Neither the European Union nor the EACEA can be held liable for them."



Transilvania
University
of Brasov





Contents

1. INTRODUCTION	3
2. ORGANIZATION OF THE SEMINAR	4
2.1. Announcements	4
2.2. Certificates.....	7
3. AGENDA, SPEAKERS, AND CONTENT.....	9
3.1. Agenda.....	9
3.2. Presentations and speakers	10
3.3. Summary of the seminar	12
4. DISSEMINATION MATERIAL AND SEMINAR ADVERTISING	14
5. CONCLUSIONS	15
6. APPENDIX I: SURVEY RESULTS.....	16



1. INTRODUCTION

The final international seminar in Aschaffenburg (Germany) took place as face-to-face event on October 8, 2025, from 9:00 a.m. to 12:00 p.m. CET.

This event was used to present the project and results of WPs to the relevant target group, mainly in relation to the dissemination of WP5 of RockChain project.

The seminar was hosted by the German Natural Stone Association (DNV). The seminar focused on combining innovative technologies such as blockchain, the internet, and big data to optimize the circular economy in the natural stone industry and was attended by aspiring master stonemasons, vocational school teachers specializing in the natural stone industry, association members, and industry experts. At this event, the results achieved were disseminated to trainers and employees in natural stone companies, students and teachers at technical colleges, and representatives of industry associations as the main target group.

The key performance indicators (KPIs) for this activity were as follows:

- Organization of an international face-to-face seminar.
- At least 21 participants at the seminar and 20 surveys.
- Online announcement.
- Networking with specialist international interest groups.
- Report on the seminar.

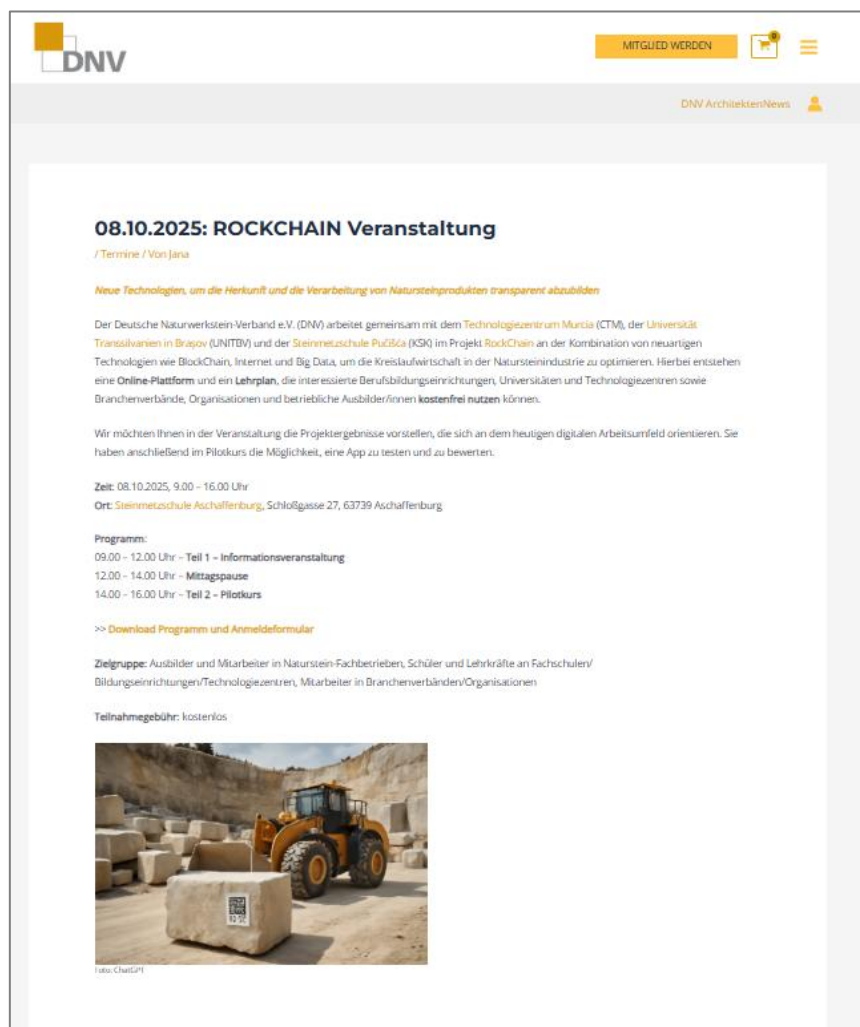
2. ORGANIZATION OF THE SEMINAR

2.1. Announcements

The event was advertised online on the DNV website, in a newsletter to DNV association members, by email to technical colleges/educational institutions, and in the trade journal NATURSTEIN in order to draw the attention of relevant target groups in the industry to the event.

The seminar announcement is available here:

DNV website: <https://dnv.online/08-10-2025-einladung-rockchain>



The screenshot shows a webpage from DNV with the following content:


- 08.10.2025: ROCKCHAIN Veranstaltung**
- / Termine / Vorjara*
- Neue Technologien, um die Herkunft und die Verarbeitung von Natursteinprodukten transparent abzubilden**
- Der Deutsche Naturwerkstein-Verband e.V. (DNV) arbeitet gemeinsam mit dem Technologiezentrum Murcia (CTM), der Universität Transilvanien in Braşov (UNITBV) und der Steinmetzschule Puşcova (KSK) im Projekt RockChain an der Kombination von neuartigen Technologien wie Blockchain, Internet und Big Data, um die Kreislaufwirtschaft in der Natursteinindustrie zu optimieren. Hierbei entstehen eine **Online-Plattform** und ein **Lehrplan**, die interessierte Berufsbildungseinrichtungen, Universitäten und Technologiezentren sowie Branchenverbände, Organisationen und betriebliche Ausbilder/innen **kostenfrei nutzen** können.
- Wir möchten Ihnen in der Veranstaltung die Projektergebnisse vorstellen, die sich an dem heutigen digitalen Arbeitsumfeld orientieren. Sie haben anschließend im Pilotkurs die Möglichkeit, eine App zu testen und zu bewerten.
- Zeit:** 08.10.2025, 9.00 - 16.00 Uhr
- Ort:** Steinmetzschule Aschaffenburg, Schloßgasse 27, 63739 Aschaffenburg
- Programm:**
 - 09.00 - 12.00 Uhr - Teil 1 - Informationsveranstaltung
 - 12.00 - 14.00 Uhr - Mittagspause
 - 14.00 - 16.00 Uhr - Teil 2 - Pilotkurs
- >> Download Programm und Anmeldeformular**
- Zielgruppe:** Ausbilder und Mitarbeiter in Naturstein-Fachbetrieben, Schüler und Lehrkräfte an Fachschulen/ Bildungseinrichtungen/Technologiezentren, Mitarbeiter in Branchenverbänden/Organisationen
- Teilnahmegebühr:** kostenlos
- 
- Foto: ChatGPT

Figure 1: DNV website.

Invitation by email to technical colleges and vocational training institutions:

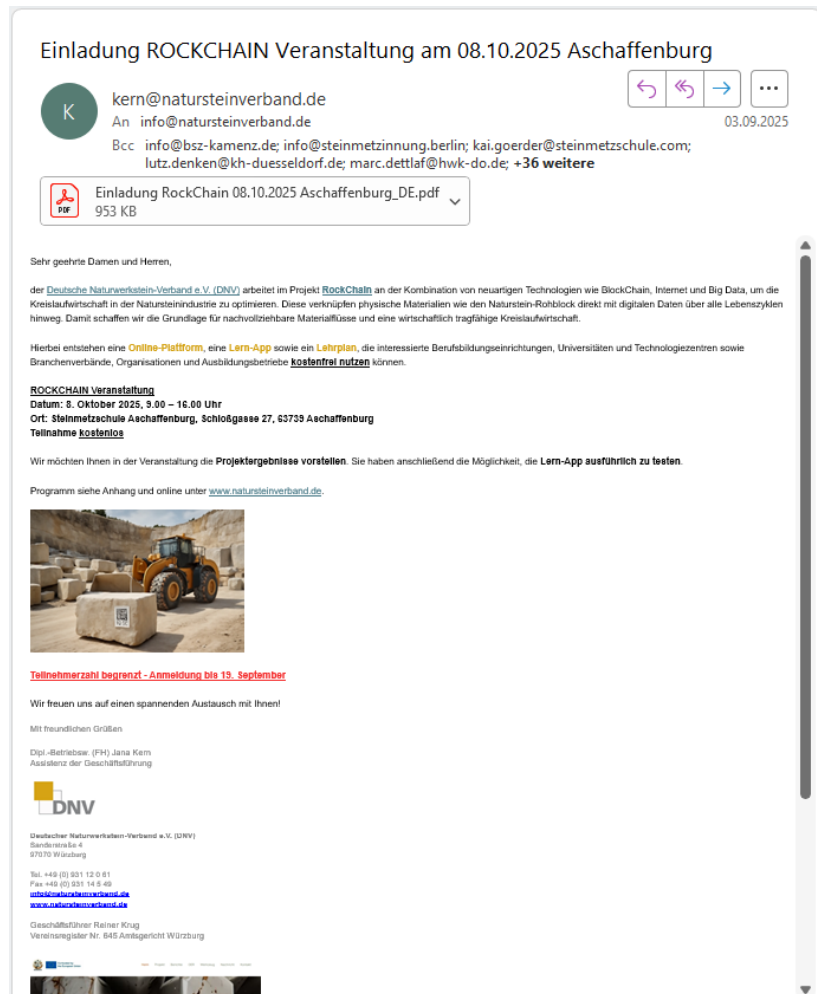


Figure 2: Emailing.

Invitation to all DNV member companies:

<https://5nrpo.r.a.d.sendibm1.com/mk/mr/sh/OycXxko2a8zXOWSOC1ctm6Zn/Z0thL4N1qGDc>



125
JAHRE

Naturwerkstein
Industrie
Verbände

Mitglieder-Newsletter

Veranstaltung ROCKCHAIN
8. Oktober 2025
Steinmetzschule Aschaffenburg



Einladung zur Veranstaltung ROCKCHAIN
*Neue Technologien, um die Herkunft und Verarbeitung
von Natursteinprodukten transparent abzubilden*

Datum: 8. Oktober 2025, 9.00 – 18.00 Uhr
Ort: Steinmetzschule Aschaffenburg, Schloßgasse 27, 63738 Aschaffenburg

Der Deutsche Naturwerkstein-Verband e.V. (DNV) arbeitet im Projekt RockChain an der Kombination von
neuersten Technologien wie Blockchain, Internet und Big Data, um die Kreislaufwirtschaft in der
Natursteinindustrie zu optimieren. Diese verknüpfen physische Materialien wie den Naturstein-Rohblock
direkt mit digitalen Daten über alle Lebenszyklen hinweg. Damit schaffen wir die Grundlage für
nachvollziehbare Materialflüsse und eine wirtschaftlich tragfähige Kreislaufwirtschaft.

Materialwert erhalten und Prozesse beschleunigen:

Hierbei entstehen eine Online-Plattform, eine Lern-App sowie ein Lehrplan, die interessierte
Berufsbildungseinrichtungen, Universitäten und Technologiezentren sowie Branchenverbände,
Organisationen und betriebliche Auszubildenden kompetenz nutzen können.

Wir möchten Ihnen in der Veranstaltung die **Projektergebnisse vorstellen**, die sich an dem heutigen
digitalen Arbeitsmarkt orientieren. Sie haben anschließend die Möglichkeit, die **Lern-App zu testen**.

Teilnehmerzahl begrenzt - Anmeldung bis 18. September

Wir freuen uns auf einen spannenden Austausch mit Ihnen!
Ihr DNV-Team

>> Download Programm



Co-funded by
the European Union



www.ROCKCHAIN.EU

Diese E-Mail wurde an kern@natursteinverband.de versandt.

Sie erhalten diesen Newsletter als Mitglied im Deutschen Naturwerkstein-Verband e.V. (DNV).
Sie werden regelmäßig über Neuigkeiten und Aktivitäten informiert.
Sie können den Newsletter für weitere E-Mail-Adressen anmelden, falls Sie dies wünschen.
Wenn Sie künftig keine Informationen mehr von uns erhalten möchten, entfernen Sie bitte mit uns
Kontakt auf oder benutzen Sie den nachfolgenden Abmeldelink zur Löschung aus dem Verteiler.

[Thema: Blick vom Natur-Steinberg © DNV](#)

[Abmelden](#)

Verarbeitet mit
Brevo

Figure 3: Flyers.

Press article in the trade journal NATURSTEIN, issue 10/25 (Germany, Austria, Switzerland):



Figure 4: Magazine.

2.2. Certificates

As part of the seminar organization, a certificate of participation was prepared for all participants with the details of the seminar and their personal data. The participants' certificates were sent by email after the seminar had ended.



TRANSVERSAL TECHNOLOGICAL SKILLS
FOR THE ORNAMENTAL ROCK INDUSTRY
FOCUSING ON THE APPLICABILITY OF
BLOCKCHAIN IN A CIRCULAR ECONOMY
2023-1-DE02-KA220-ADU-000166863



Co-funded by
the European Union

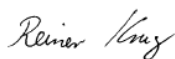
TEILNAHMEBESTÄTIGUNG

Hiermit bestätigen wir

Herrn Paul Engel

die Teilnahme am **RockChain Seminar und Pilotkurs am 8. Oktober 2025, 9 – 17 Uhr**

an der Städtischen Fachschule (Meisterschule) für Steinmetzen und Steinbildhauer in Aschaffenburg.



Reiner Krug

Deutscher Naturwerkstein-Verband e.V.

Aschaffenburg, 08.10.2025



Transilvania
University
of Brasov



Projektbeteiligte: Deutscher Naturwerkstein-Verband e.V. (DNV), Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM), Universitatea Transilvania Din Brasov (UNITBv), Klesarska skola (KSK)

Figure 5: Certificate of participation for participants.

3. AGENDA, SPEAKERS, AND CONTENT

3.1. Agenda

The following agenda was drawn up for the final international seminar of the RockChain project. The seminar lasted a total of 3 hours. The 3 presentations were given by the 4 project partners (DNV, CTM, UNITbv, and KSK). Finally, Benedikt Bührle and Marcel Winter from the start-up company "CMID – Component & Material Identity" presented a contactless fingerprint technology via online transmission that recognizes natural surface patterns directly on the material.



DNV Deutscher Naturwerkstein-Verband e.V.
Sanderstraße 4
97070 Würzburg
Fon: 09 31.1 20 61
Fax: 09 31.1 45 49
info@natursteinverband.de
www.natursteinverband.de

Co-funded by
the European Union
WWW.ROCKCHAIN.EU

**ROCKCHAIN - Neue Technologien, um die
Herkunft und die Verarbeitung von
Natursteinprodukten transparent abzubilden**

Programm 08.10.2025

Steinmetzschule Aschaffenburg, Schloßgasse 27, 63739 Aschaffenburg

Teil 1 - Informationsveranstaltung

09.00 – 09.15 Uhr Begrüßung

09.15 – 09.45 Uhr ROCKCHAIN - Allgemeiner Überblick (DNV)

09.45 – 10.30 Uhr Vorstellung der Projektergebnisse (CTM)

10.30 – 11.30 Uhr Welchen Nutzen bringt dieses Projekt? (UNITbv, KSK)

11.30 – 12.00 Uhr CMID-Technologie - eine Lösung für die Erstellung einer digitalen Materialidentität (CMID online)

Zielgruppe: Ausbilder und Mitarbeiter in Naturstein-Fachbetrieben, Schüler und Lehrkräfte an Fachschulen/ Bildungseinrichtungen/ Technologiezentren, Mitarbeiter in Branchenverbänden/ Organisationen

Teilnahmegebühr: keine

DNV **CTM** **UNITbv** **KSK**

Projekt-Mitglieder: Deutscher Naturwerkstein-Verband e.V. (DNV), Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales (CTM), Universitatea Transilvania Din Brasov (UNITbv), Klesarska skola (KSK).

Figure 6: Agenda.

3.2. Presentations and speakers

Reiner Krug, Managing Director of DNV, began by giving a general overview of the project. The RockChain project offers new digital concepts in the natural stone industry as a basis for the further training of waste managers, technicians, and experts from the stone and construction industries in order to improve the circular economy in the stone industry through the combination of innovative technologies such as blockchain, the internet, and big data. It provides a training basis for the management of by-products from the natural stone industry. The project aims to promote digital transformation, which is currently hardly digitized in professional practice.

David Caparros Pérez from the Technology Center for Mineral Raw Materials (CTM) presented the project results, which are geared toward today's digital working environment. He referred to the online platform, an app, and a curriculum that interested vocational training institutions, universities, and technology centers, as well as industry associations, organizations, and company trainers, can use free of charge.



Figure 7: Example of presentation.

Tamara Plastic, principal of the Pučišća Stone Masonry School in Croatia, and **Radu Muntean**, professor at the University of Transylvania Brasov (UNITBv) in Romania, provided practical insights into the benefits of this project.

Croatia has a long tradition of stone processing—especially on the island of Brač. This is where the village of Pučišća is located, which has been known for centuries for its white or yellowish limestone. Many buildings there, including those in historic towns, are constructed from this stone. As a result, Croatia has a distinctive natural stone architecture: the quarrying, processing, and distribution of natural stone are centrally organized here. Natural stone is therefore not only used for prestigious projects, but is also part of the local building culture.

Radu Muntean emphasized that Romania also has an active natural stone industry and quarries. There are companies that quarry and process marble, granite, limestone, travertine, and other natural stones. Natural stone is a very sustainable building material: durable, recyclable, regionally available—with good potential for circular economy and resource-efficient construction. However, he warned that without structural support, awareness, and planning, this potential often remains untapped.

Raphael Miehling, a specialist teacher for natural stone technology at the Eichstätt vocational school, opened a discussion on a possible practical link between physical natural stone blocks and digital data across all life cycles. He also wanted to know what costs and data volumes this could entail.



Figure 8: Picture.

Finally, **Benedikt Bührle** and **Marcel Winter** from the start-up company "CMID – Component & Material Identity" presented a contactless fingerprint technology via online transmission that recognizes natural surface patterns directly on the material.

This creates a forgery-proof digital identity that accompanies each material throughout its entire life cycle and can be seamlessly integrated into existing production processes.



Figure 9: Picture.

3.3. Summary of the seminar

The seminar was held at the Aschaffenburg Stonemasonry School in the master craftsman class and their specialist teachers (15), as well as in front of specialist teachers from other vocational schools and DNV association members, specifically from natural stone extraction and processing companies (13) – (see list of participants), which took place on October 8, 2025, from 9:00 a.m. to 12:00 p.m.

The seminar provided a platform for experts from the stone and construction industries to discuss the circular economy in the natural stone industry and the challenges it presents. Participants ranged from those with extensive knowledge of topics such as the reuse of natural stone, blockchain, and digital material identity to those for whom the concept was new.



Figure 10: Picture.



4. DISSEMINATION MATERIAL AND SEMINAR ADVERTISING

After the seminar, the final international RockChain seminar and its results were disseminated through various channels. These included articles in the trade press, the DNV member newsletter, and the DNV website.

To promote the seminar, increase participation by external parties, and raise awareness of the project, various promotional materials such as flyers and a roll-up banner were created. The seminar was also advertised via email invitations in the relevant DNV networks.

In addition, since February 2024, the project has been promoted at all DNV events and trade fair appearances at international construction fairs with a roll-up banner.



5. CONCLUSIONS

Based on the report submitted on the final international seminar in Aschaffenburg (Germany) for the RockChain project, the following conclusions can be summarized:

The seminar was well organized by DNV, as reflected in the detailed planning of the agenda, the choice of venue, the registration process, and the distribution of certificates. The seminar featured a variety of speakers and was aimed at learners with connections to the construction sector who are interested in the circularity of natural stone. The presentations provided valuable insights into the objectives and results of the RockChain project. All KPIs were achieved.

Overall, the final international seminar served as a valuable platform for disseminating the results of the RockChain project, promoting networking among professionals, and generating further interest and commitment to sustainable circular construction practices with natural stone.

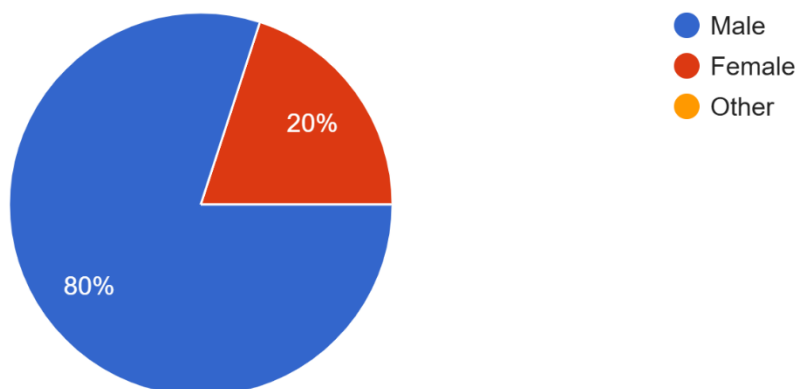
6. APPENDIX I: SURVEY RESULTS

General data:

Gender:

Gender:

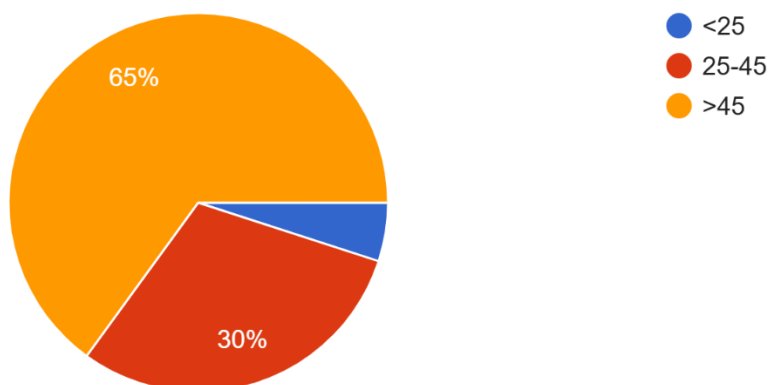
20 responses



Age:

Age:

20 responses

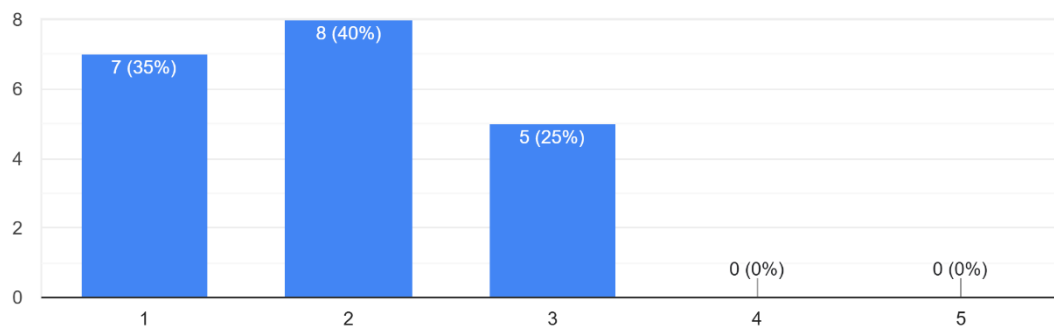


Before my participation in this activity:

I had been familiar with blockchain.

I had been familiar with blockchain.

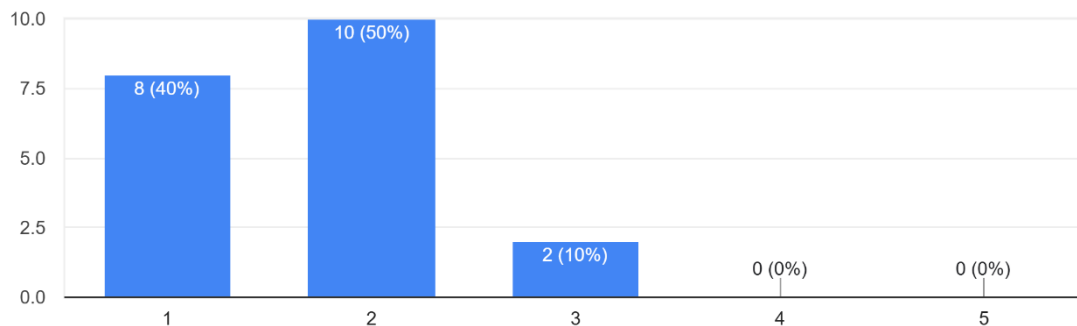
20 responses



I had heard about blockchain used in the stone sector.

I had heard about blockchain used in the stone sector.

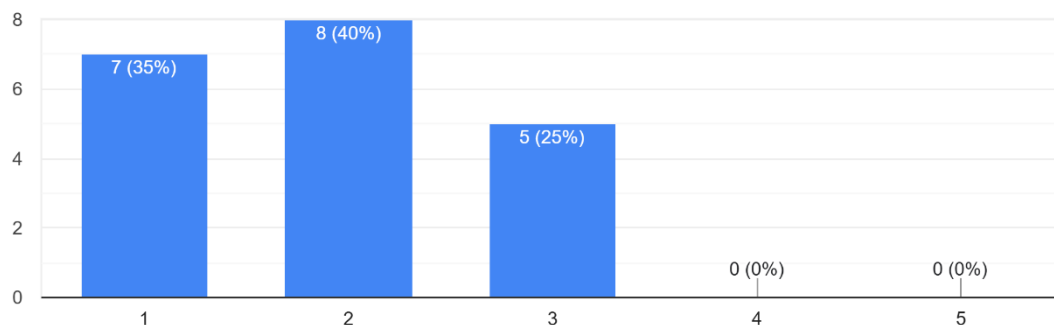
20 responses



I had been involved in similar activities concerning blockchain.

I had been involved in similar activities concerning blockchain.

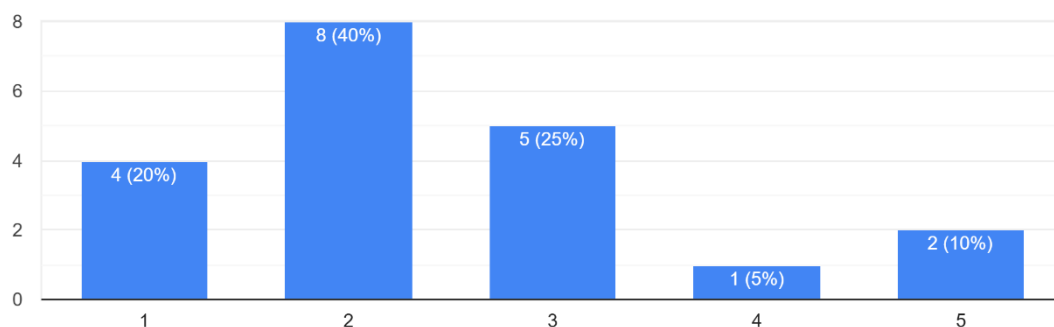
20 responses



I had been involved in similar activities concerning new technologies in the stone sector.

I had been involved in similar activities concerning new technologies in the stone sector.

20 responses

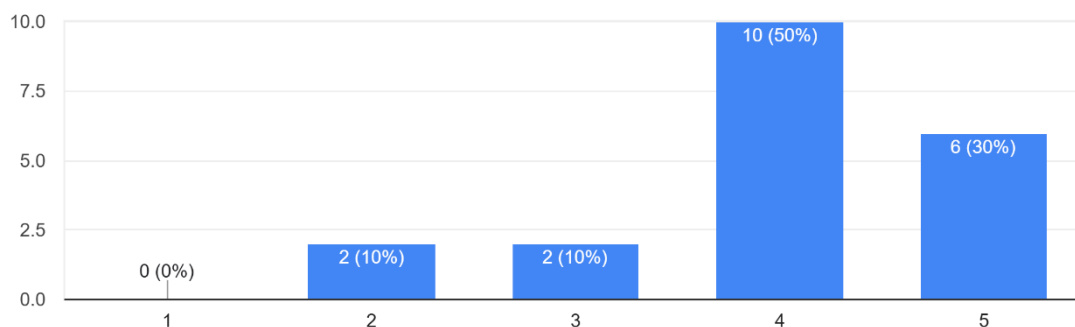


After my participation in this activity:

I am more familiar with the blockchain.

I am more familiar with the blockchain.

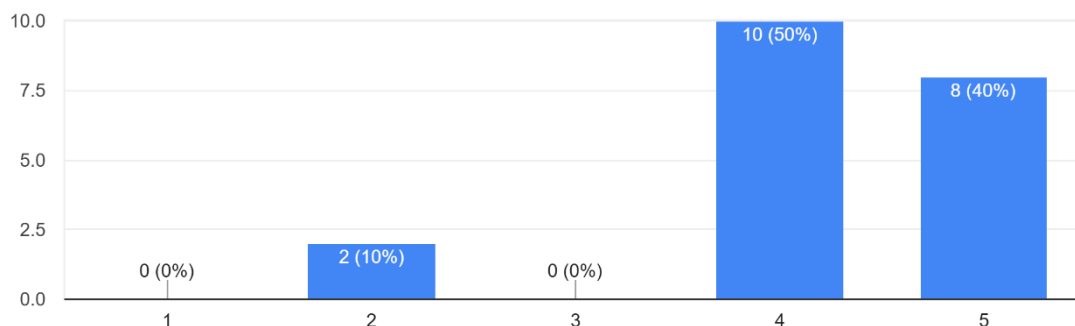
20 responses



I would like to learn more about blockchain in the stone sector.

I would like to learn more about blockchain in the stone sector.

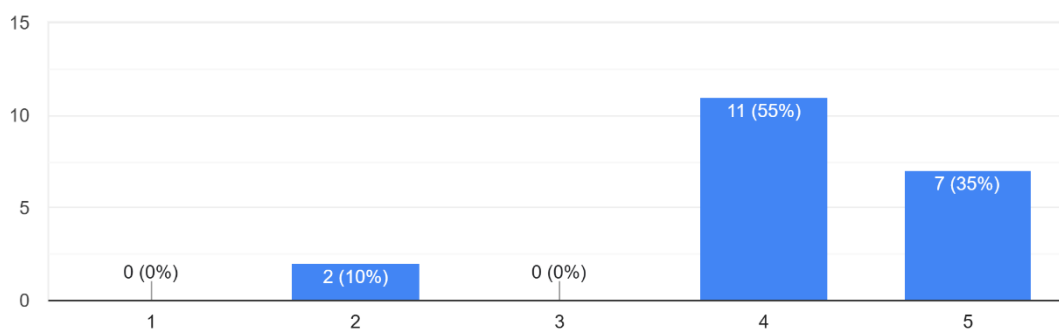
20 responses



I would like to be involved in similar activities concerning blockchain in general (not only for stone sector).

I would like to be involved in similar activities concerning blockchain in general (not only for stone sector).

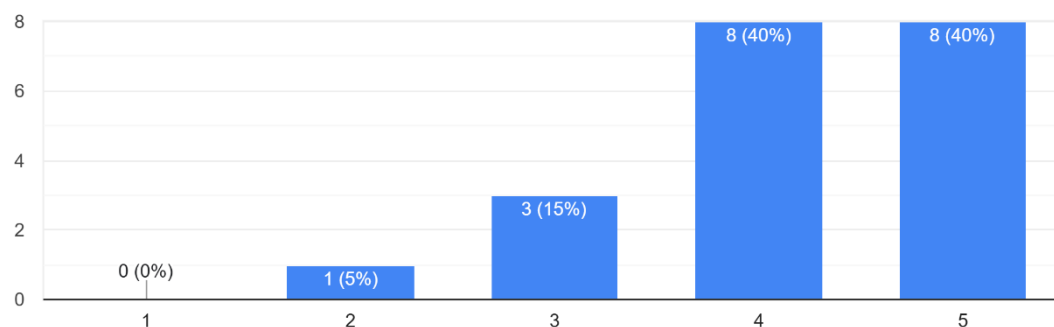
20 responses



I am interested in participating in other stone sector-oriented activities in the future.

I am interested in participating in other stone sector-oriented activities in the future.

20 responses

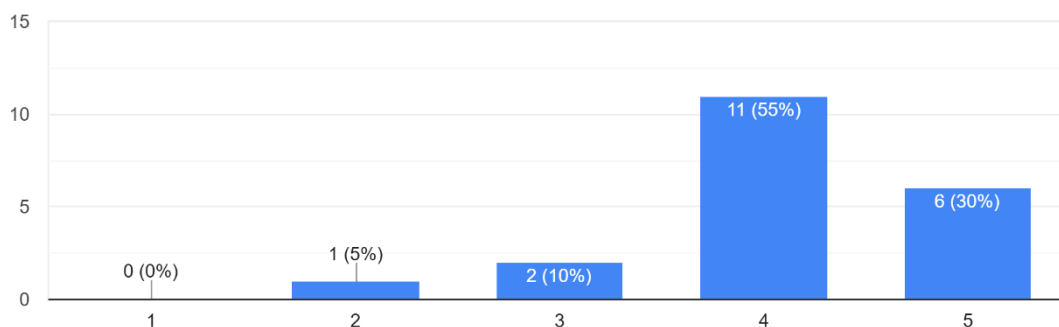


Evaluate your experience at this event:

The information and advice provided was useful.

The information and advice provided was useful.

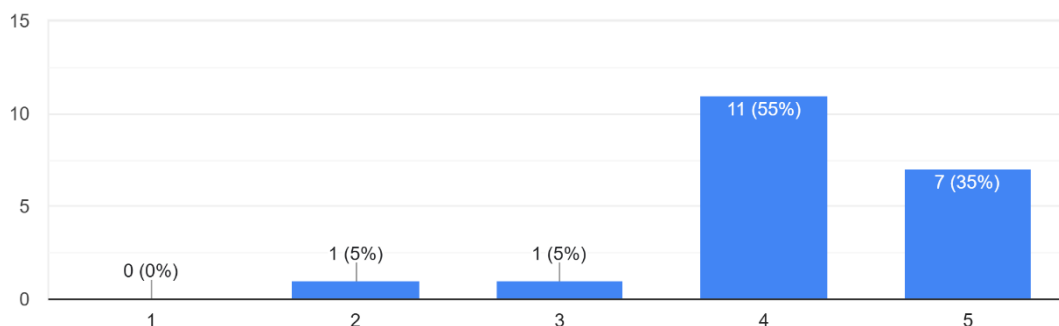
20 responses



The information was communicated in an understandable manner.

The information was communicated in an understabe manner.

20 responses



I was provided the opportunity to ask questions and these were satisfactorily answered.

I was provided the opportunity to ask questions and these were satisfactorily answered.

20 responses

