Engaging Industry Speakers in the Newly Transitioned Virtual Classroom during COVID-19

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| Abstract: |
| This paper discusses our innovative approach to engaging practitioners in the newly transitioned virtual classroom during the COVID-19 pandemic. With restrictions on face-to-face guest speaker sessions and industry visits we recorded interviews with practitioners on themes aligned to our course syllabus which were then uploaded to our online learning platforms. We present the benefits of such an approach as well as the challenges faced, and lessons learned. Our experience suggests that this approach has several advantages and can be replicated with limited modifications, if certain student-centered guidelines are followed. |
| **Keywords:** practitioners, virtual classroom, computer-supported collaborative learning. |

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# Introduction

The COVID19 pandemic has led to many challenges in higher education especially in traditional universities and notably those with limited reliance on, and investments in, digital technologies. With lockdowns and travel restrictions as a result of the pandemic, traditional classroom-based university lecturers across different parts of the world had to transition their classroom teaching to online course delivery (Van Slyke et al., 2021). The transition happened quickly with limited support from their universities as they themselves suffered from lack of readiness. Several challenges were experienced as a result which included among others a need for lecturers, including ourselves, to become familiar with several technologies, such as MS Teams, Zoom and Webex as well as a requirement for a complete redesign of course delivery especially for the academic year 2020-21. It is within this context of unprecedented changes and new challenges, that we, as newly transitioned online lecturers, had to rethink and adapt the way we incorporate industry viewpoints and practitioner input into our teaching.

The relevance of information systems (IS) research has been a topic of considerable discussion and debate within the IS community (see for instance, Rosemann and Vessey, 2008; Saunders, 1998), and interactions between academia and industry has been proposed as a route to ensuring relevance (Kohli, 2001). More recently, the importance of aligning business education with business practice was noted as being central to AACSB’s Guiding Principles for business school accreditation (AACSB, 2021). We believe that practitioner perspectives are a key route to learning within the IS curriculum as they help bring theory to life and maintain the relevance of what we teach in a discipline that is rapidly changing due to digital transformation of both business and society (see for instance, Lyytinen et al., 2021). Pre-pandemic, we would occasionally invite practitioners across a range of organizations to present guest lectures to our students on specific subjects. In some cases, we would also arrange for students to visit companies within the local proximity where they would interact with IT experts and see first-hand the company’s investments in digital technologies, use their video-conferencing suite etc.

During the pandemic, we had to rethink how we incorporated industry experts into our course delivery with the mode of delivery being solely online. In what follows, we present our initiative, evaluate its impact on educational methodology and pedagogy, discuss our experiences and examine lessons learned and wider implications.

# Initiative on Engaging Practitioners in the Virtual Classroom

The rapid transition to online teaching at the start of the academic year 2020-21 took place against a backdrop of emerging functionality within MS Teams (for instance, the break-out room function had not yet been introduced at the start of our academic term in September 2020 whilst other features were only being added gradually) and limited training on the use of the platform. Given that we had been using Moodle as our main virtual learning environment (VLE) for many years, we made the decision to introduce industry experts through pre-recorded video-based interviews that could then be uploaded to the course pages on Moodle. The videos were first recorded via MS Teams or other collaboration platforms such as Cisco Webex or Zoom, and then uploaded through the Panopto[[1]](#footnote-1) software and subsequently on the specific VLE platform, Moodle. The use of Panopto was mandated by the University as recordings made within or uploaded through Panopto could be easily pulled into the Moodle course pages. It also had the additional functionality of automatic captions and the ability to edit videos and analyze student engagement. Given the rapid transition to online learning, we decided to collaborate across courses and programs on this endeavor. With a view to doubling the practitioner content on our respective courses, we identified specific industry practitioners for interview and then shared the interviews we conducted with each other whenever they matched the course syllabus. As a result, each course benefited from having more practitioner input during the year than in any previous year.

We invited industry speakers to contribute to the following topics: online collaboration, cloud computing, digital transformation, digital strategy, and managing misunderstandings in virtual teams (see Table 1). The practitioners were all existing contacts, who were also guest speakers in our classes in previous years. We shared the interview questions with the practitioners prior to the recording. The first four talks were shared among two courses on different master’s programs (i.e., a course titled ‘Information and Operations Management’ on the MSc in International Management (IM) program, and a course titled ‘E-Business’ on the MSc Business Information Systems (BIS) program). The MSc IM program is a generalist conversion degree program composed mainly of students who do not have a prior background in Business and Management studies while the MSc BIS program aims to create hybrid managers who understand the role of digital technologies within a business context. Neither program requires students to have prior background in technology or business and management. The two courses (Information and Operations Management as well as E-Business) aim to introduce students to the foundational concepts, theories and practices in their respective fields. As such these are introductory courses but set at the master’s level. The information management section of the course titled ‘Information and Operations Management’ aims to introduce students to some of the key information systems issues faced by organizations in today’s global business environment. Starting with the use of digital technologies for attaining competitive advantage, the course uses existing research and case studies to address organizational and management concerns in the effective implementation and use of information systems and technologies, covers recent developments such as big data, the Internet of Things, and digital business transformation, and examines the opportunities and challenges these create for organizations. The E-Business course draws together a wide variety of conceptual models and frameworks, existing empirical research and case study material to provide a coherent insight into e-business from a management perspective. In doing so, it focuses upon the contribution of e-business technologies to the effectiveness and efficiency of both large and small entrepreneurial firms, as well as pre-digital and post-digital organizations, and the impact that these are having on business and industry at large.

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| **Interview No. / Topic** | **Video length (minutes)** | **Program / Course** | | | | | | | | |
| **MSc IM / Information Management**  **(126 students)** | | | **MSc BIS / E-Business**  **(10 students)** | | | **MSc DIA / Leading Online Collaborations**  **(36students)** | | |
| **ACR**  **(%)** | **UV** | **VD** | **ACR**  **(%)** | **UV** | **VD** | **ACR (%)** | **UV** | **VD** |
| 1.Online Collaboration | 15.9 | 74.2 | 10 | 10 | 100 | 1 | 1 | 63.2 | 18 | 26 |
| 2. Cloud Computing | 24.9 | 43.8 | 19 | 25 | 52.5 | 2 | 2 | NA | NA | NA |
| 3. Digital Transformation | 12.5 | 84.7 | 26 | 40 | NA | NA | NA | NA | NA | NA |
| 4. Digital Strategy | 21.2 | 29.0 | 16 | 23 | 1 | 1 | 1 | NA | NA | NA |
| 5. Managing Misunderstandings in Virtual Teams | 8.2 | NA | NA | NA | NA | NA | NA | 74.9 | 14 | 23 |

Table 1. Practitioner interview topics and associated analytics

(ACR: average completion rate (*When viewing videos, this is the average percent watched in a video by the user* - source: <https://support.panopto.com/s/article/User-Statistics>); UV: number of unique viewers; VD: number of views and downloads; NA: not applicable as the interview was not used in this course)

The final, specialized topic, ‘Managing misunderstandings in virtual teams’ was included in a course titled ‘Leading Online Collaborations’ on a specialist master’s program called MSc Digital Innovation and Analytics (DIA) which aims to provide an in-depth understanding of how to integrate digital technologies such as mobile computing, social media, and data analytics tools to innovate business practices. The course on online collaboration aims to develop an understanding of the role of online collaboration platforms in fostering and managing digital innovations while also examining the role of leadership in online communities and virtual teams as well as the characteristics of effective online leadership.

Our initial plan was to keep the interviews focused and short, based around 3-5 themes or questions per interview. However, in practice the length varied and was determined by the speaker and the flow of the conversation. The length of the recorded interviews varied as shown in Table 1 between 8 and 25 minutes. Where appropriate practitioners were invited to share their organizational experience and to provide examples of challenges faced and solutions. With this we aimed to bring practical relevance to theoretical concepts and models. Although the length of videos varied, we were mindful not to exceed 30 minutes for any video based on the guidance provided by the University in relation to the recording of online lectures. While the Panopto software provided the functionality to edit the videos we did not explore this option due to limited technical expertise at the time.

# Impact on Educational Methodology, Assessment and Evaluation

Computer Supported Collaborative Learning can be implemented in different ways including the macro-script and micro-script approach (Hämäläinen, 2012). Our initiative can be characterized as a macro-script approach, as we did not describe in detail what our students should do (micro-script), but instead we provided them with guidelines on how to engage with an activity or task, leaving a lot of space for students to work independently. With this in mind, our pedagogical purpose was twofold: first, we aimed to expose students to real-life industry experiences in their virtual classroom, and second to develop critical thinking in the use and implementation of specific information systems applications across different organizations and industries. In relation to the latter, our interviews with the industry experts sought to unpack not just the opportunities but also the challenges of the discussed phenomena (e.g., online collaborations, cloud computing etc.) therefore ensuring that students appreciate that technologies alone do not determine success, nor is their implementation always successful; rather a critical understanding of human and organizational factors is necessary. Some of these factors were mentioned in the interview, and students were also prompted to explain these as well as identify others during in-class discussions.

Unlike other industry talks that are available online, the uniqueness of our talks was that these were planned and guided by ourselves (the course instructors) through the interview/conversational approach. In an interview style conversation, the instructor was able to lead the conversation by guiding the practitioner to talk about topics that were relevant to the course. Therefore, the students could see a familiar face (their lecturer or another faculty member) leading the interview and not just another impersonal YouTube presentation. The instructor would ask questions that were relevant to the students’ own program of study and specifically driven by themes derived from the course syllabus. Interviews with case study organizations also allowed us to bring particular cases to life through the credibility of practitioner voices. Our approach enhanced the learning experience by widening the breadth of coverage of issues that matter to practice while ensuring theoretical relevance and alignment with course topics.

Our initiative was assessed based on both qualitative and quantitative approaches. With regards to the former, students were encouraged to provide feedback on the interviews which was generally positive. Though qualitative feedback was limited and was only provided by a handful of students, all the responses received were positive and supportive of the initiative. For instance:

“I have personally found the interviews to be very insightful and helpful”.

“I love the way you interviewed those executives …”

Though there are several advantages of face-to-face guest lectures by practitioners within the classroom, including the opportunity for students to engage directly with the practitioners and ask questions, there are also challenges such as the practitioner’s availability. In-class guest lectures by practitioners were often opportunistic and entirely dependent on their availability during scheduled class times. Pre-recorded interviews allowed us to be more strategic and interview appropriate practitioners better aligned with course objectives.

Our approach ensured that students who had other commitments and those who remained overseas were still able to benefit from access to practitioner perspectives that enhanced their educational experience despite the restrictions on face-to-face teaching and guest lectures. At the same time, from the point of view of the students, the lack of direct interaction with the practitioner was seen as a limitation, as evidenced by the following quote from a student.

“Probably [you] can give us a forum to come up [with] questions that we can ask [practitioners]. So we can feel more related and feel like we join[ed] the interview. But overall, it’s awesome. I love it“.

Further to the qualitative feedback received, we undertook a post-implementation assessment of this initiative following the end of the academic year 20-21. Our assessment was complemented by extracting analytics on the usage of videos by students; these provided insightful information on video-views, downloads and completion of video-views. These data were extracted from Panopto analytics.

We used Panopto statistics to examine the overall views and downloads as well as completion rates for each of the industry interview recordings during the specific academic term when these were used. Figure 1 shows a representation of these statistics for one of recordings. Table 1 also includes the viewing analytics for all the videos categorized by courses in which the videos were shown.

Chart

Description automatically generated

Figure 1. Video Analytics Snapshot from Panopto Software (Interview 5)

According to our evaluation, usage statistics for the videos seemed to depend on the length of the video with shorter videos generally garnering higher average completion rates. For example, interview 5 (figure 1) with a duration of 8.2 minutes had a 74.9% completion rate whereas a video with a 24.9 minute duration had a 43.8% and 52.5% completion rate for the two courses in which they were used (table 1). With the view that all videos were relevant to the course syllabus we interpret the results to mean that shorter videos were generally more likely to attract views and had an increased percentage of completion. Videos that were relevant to course assessment also attracted higher views (e.g., interviews 1 and 5, Table 1). In addition, the popularity of companies that our speakers were affiliated with, seemed to influence the number of views with well-known companies like Cisco and Nestle receiving higher viewership and completion numbers. Other factors that might have impacted the views included students’ familiarity with the interviewers (notably their own lecturer or associated faculty member interviewing industry experts) and an alignment between interviews and course syllabus.

# Discussion of our Experiences

The pre-recorded interviews with industry experts had several advantages. We found our new approach to be more effective than organizing occasional in-class guest lectures due to the complexities of timetabling and difficulties in matching timetabled slots and session topics to practitioner availability. The practice allowed us to bring industry experts to the ‘virtual classroom’ to support student learning and understanding of specific themes at times that best fit with course requirements rather than being based around logistical issues such as speaker availability and class schedules. It offered students with language difficulties the opportunity to re-watch the interviews as needed. This was also the case for students who were located across different time-zones. The approach also permitted students to pace their learning and to watch the videos alongside related materials at a time convenient to them during the week of the session and later on as suitable. For example, as shown in Figure 1, even though most of the students who viewed the video did so in mid-February (as guided by the course syllabus), there were instances where students watched the video several weeks later, at the time of the assignment submission as they could see alignment between the videos and their assessment. Though the alignment was not direct, i.e., students were not specifically asked to use the video recordings in their essays or answer video-specific questions in the multiple-choice tests, there is evidence as shown in the figure that some students did watch the videos as part of their revision and preparation for the course assessment.

Video recordings made using the Panopto software has the added functionality of usage analytics (for instance, views, downloads, unique user views and time associated with the viewing of the video). While this may provide some information on usage and video completion rates it does not, however, provide rich insights into levels of engagement which might vary considerably between types of learners (Yoon et al., 2021).

Despite the benefits from this approach, we also noted some challenges in using pre-recorded material for asynchronous use by students. These included the impact of online fatigue (Peper et al., 2021) and related affective factors such as mood (Rodrigues et al., 2011) on the students’ use of recorded material. Given the extended screen times necessitated by COVID-19-related transition to online learning, additional pre-recorded material such as ours could become an impediment to further engagement at least in the case of passive learners (Yoon et al., 2021). Such learners may require additional in-class guidance and specific video-related tasks to improve engagement. More directed use of pre-recorded interviews clearly linked to related assessments might also help improve usage and engagement. While the automatic captioning facility within Panopto had relatively few errors, some editing may be required to correct captions and make them useful for students with hearing disabilities particularly when the interviews involve non-native English speakers.

The lack of direct interaction with the practitioner is also a limiting factor to pre-recorded interviews. Some students preferred the traditional ‘guest speaker’ approach to practitioner input as it affords the possibility for synchronous exchange and learning alongside the networking benefits that may arise. However, given the pandemic induced restrictions we believe our approach has made a useful contribution to learning through other modes of practitioner input.

# Lessons Learned and Implications for the Future

There are several lessons learned from our initiative. First, regardless of return to in-person teaching, pre-recorded interviews are useful for both lecturers and students as they provide an easily accessible repository of practice perspectives. The instant availability of such industry perspectives provides an additional learning tool regardless of the availability of industry guest speakers for face-to-face interactions on campus. Second, such initiatives need to be well-thought out and planned to match the course learning outcomes and therefore well-integrated into the curriculum. For this, these need to be an embedded part of the weekly learning and practical activities. For example, even though we encouraged students during the online workshops to bring views shared in the videos, this level of engagement was limited and restricted to the most active student learners. As such it is important that clear guidance is provided in the form of discussion questions for student engagement with the videos ahead of scheduled classes. Third, we note that students tend to engage more with materials that are directly relevant for their assessments. This suggests a more pragmatic approach that better aligns such interviews with course assessments to improve engagement. Fourth, students are drawn to more popular companies due to the name recognition they afford. This shouldn’t, however, preclude the use of less well-known organizations for this exercise but there is a lesson here for us to increase awareness of such companies among students as well as explaining the benefits of engaging with them. Finally, given the shorter attention spans of generation Z students and their interest in video content for learning (Pearson, 2018) shorter videos are more likely to be watched by students (see also, Guo et al, 2014).

Combining theory with practice is critical in information systems and management disciplines. When the pandemic disrupted plans for face-to-face guest lectures, we developed a creative solution that has, with hindsight, been more effective in presenting industry voices to a digitally savvy generation of students who often prefer to watch videos and access study materials at times that suit them. Not only is this approach easily replicable across courses it can also create a repository of practice perspectives for our courses. Focusing such interviews on enduring themes as opposed to specific digital tools that may become unfashionable after a period, will ensure that the video library retains relevance for a longer period. Such videos can be developed with the purpose of supporting students in specific programs of study, not just specific courses enabling the development of a repository of pre-recorded videos with several industry experts. For example, a specialized master’s program on Digital Innovation could develop its own repository of video interviews with Chief Digital Officers and other Digital Leaders across a range of organizations and sectors and across different countries. Similarly, this repository could be at a departmental level and used to support different programs of study, thus making these more widely available to a broader audience. Accordingly, interviews could be longer with the aim to cover different topics, and these can then be edited to suit particular courses and even programs. However, this would require departmental support both in terms of technical support and infrastructure.

As Ma et. al. (2015) argue, the role of the instructor in increasing student engagement in the online environment is hugely important. In their study, these researchers emphasize the importance of online program design particularly focusing on the materials and tools that instructors provide participants. Therefore, as we develop our initiative, we recognize the importance of not just liaising with students but rather working with them to co-create practitioner videos. An option we would like to consider in this regard is to give the opportunity to students to identify their own questions which can then be raised with the industry expert during the interview. This we believe will increase student ownership of the recorded interviews. This suggestion was reinforced by student feedback as evident in section 3. While it will be a challenge to include many questions from students within a short interview, this approach will at least give us a steer on the kinds of topics that students are keen to explore further. One way to implement this would be to invite two or three student representatives to participate in the interviews. Students may need to conduct some background reading ahead of the interviews to improve familiarity with the interview topic as well as with the practitioner’s company. Future research could explore if such participation can lead to better engagement. Student participation is also likely to be welcomed by practitioners given the nature of guest speaker sessions where such interaction is often expected and strongly encouraged by practitioners. It may also lead to unexpected and surprising questions for the practitioner from the students leading to a more engaging interview. We realize the complexity of implementing this within the short time period available to us to deliver a course due to the three-month academic term that is common within the UK higher education system and recognize that this may more easily be implemented within a semester system that can allow for better preparation times.

As we move forward, and towards a return to on-campus teaching, the pre-recordings can be used in two specific ways: (i) the shorter videos can be shown in the classroom as part of lectures or workshops to stimulate in-class discussions helping bring bridge theory and practice, and (ii) students could be instructed to watch these on the VLE site prior to the class and they could then be used for in-class group discussions based around a set of pre-assigned video-related questions. Both of these approaches can help reinforce key messages from the interviews, better align practitioner concerns with key course topics and help frame a critical discussion around the role of digital technologies in organizations. We also plan to invite some of our practitioner contacts to meet students online or on campus to further expand on material covered in the interviews so that the in-class time is spent on interaction with the guests as opposed to watching PowerPoint presentations.

# Conclusion

In this paper we presented our initiative to transition our engagement with industry experts from the traditional classroom visit and guest lectures to the online context owing to the disruption imposed by the COVID-19 pandemic during the 2020-21 academic year. Using the limited resources we had available at the time, notably limited training on an unfamiliar MS Teams platform where various technical features were being added gradually, our initiative involved a series of pre-recorded interviews with selected industry experts. We highlighted lessons learned as well as benefits to students and challenges faced. We have also shown that our collaborative approach can quickly help develop repositories of practice for IS departments while simultaneously enhancing the relevance of our curriculum. The pandemic has forced us and other academics to rethink how we deliver our teaching but also how we engage with industry online to support our curriculum. Such initiatives demonstrate that instructors should be adapting their teaching and learning practices to respond to educational, and wider societal and organizational needs and challenges.

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1. Panopto is software that allows users to create and share video content. [↑](#footnote-ref-1)