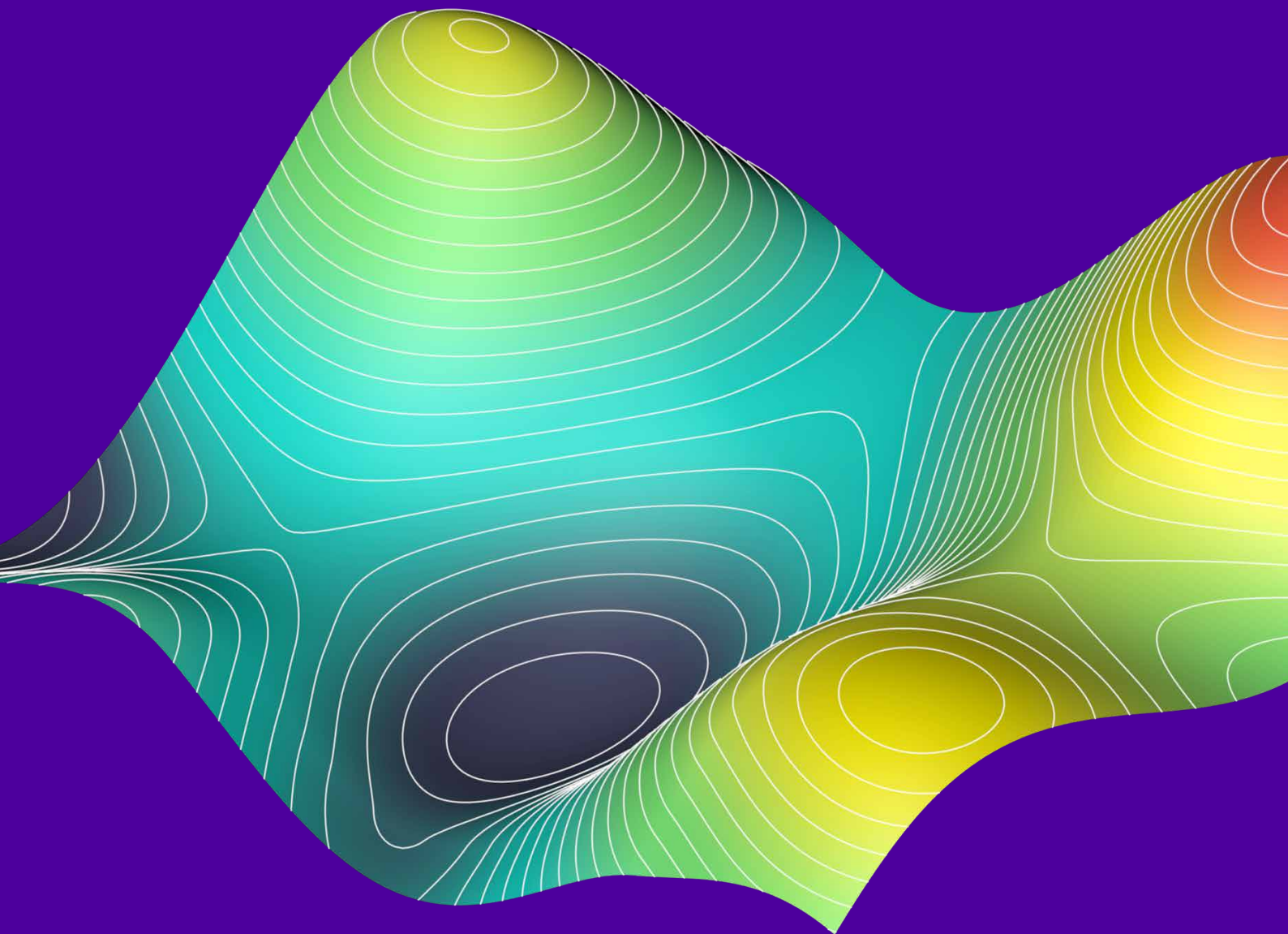


 Time is Ltd.

Working from Home

The People Aspect of Switching to Home Office





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The COVID-19 pandemic forced many companies to radically and quickly change the way they run their business processes. A large part of that change was driven by the fact that a significant part of the workforce had to work from home. Such an arrangement posed a huge challenge for management, as they had to ensure employees could collaborate effectively while working remote. In this situation, it is crucial for management to be able to track collaboration patterns, and how they evolve over time, so they can make appropriate corrective actions if needed. One way to achieve that is by analyzing traces of employee activity on various online collaboration platforms. This whitepaper demonstrates this approach by presenting a series of business-motivated metrics of calendar usage that are used by our clients for tracking and steering their transition to remote work arrangement, and considers the productivity and employee experience-related aspects of this switch.

Working From Home is Here to Stay

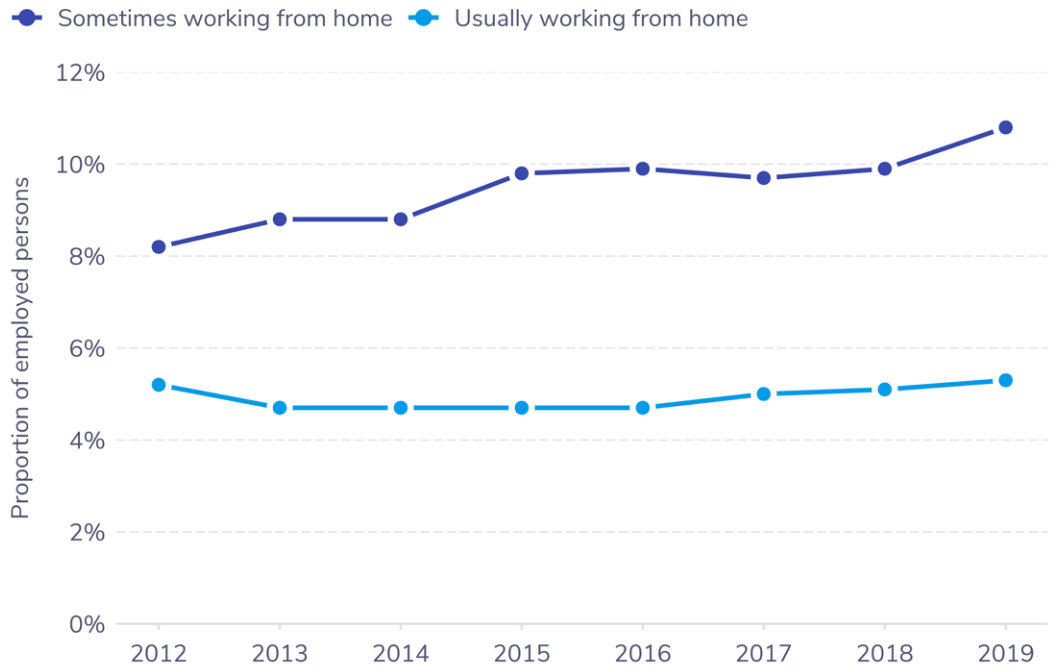
In the wake of the COVID-19 pandemic, companies worldwide are reconsidering remote work arrangements. While Facebook and Google plan to return to their offices in 2021 (at 30% lower capacity) (Holmes, May 2020), tech giants such as Twitter have offered the flexibility for their employees to work from home permanently should they wish (Kelly, May 2020). This is not only the case of the tech industry; even firms in industries that do not lend themselves easily to remote activities (as work needs to be performed on site) have introduced policies to allow part of their workforce to stay home. As a result, millions have experienced working from home for the first time (Slack, April 2020; Liang, 2020). Although employer reactions have been mixed, even these companies are starting to realize that working from home can bring multiple benefits - such as lowering their costs and even increasing employee satisfaction (Crunchr, June 2020).

The switch to working from home at scale, which is now driven by COVID-19, is part of a larger trend towards working from anywhere and engaging many different types of workers that has been going on in the last decade (see Graph 1 for illustration of this trend in EU countries). According to Deloitte's Future of Work report (March 2020), in the future working world, " collaboration tools and platforms will support dynamic work locations and asynchronous collaboration. An agile mindset will be the norm, and organizations will value adaptability over procedure ". However, we are still far from this ideal state - and companies' focus is still largely on covering the basics - mainly technology and the way working from home makes employees more or less productive and likely to collaborate with their colleagues.

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Share of employed persons working from home in EU countries

Data for years 2012-2019



Source: Eurostat

Graph 1: Chart illustrating the growth of the number of employed people (aged between 15 and 64) who sometimes or usually work from home in EU countries between 2012 and 2019 as a percentage of total employment. While the proportion of employed people who usually work from home remains relatively stable across the years (with a slight upwards trend in the last four years), in the case of employed people who work from home occasionally, the proportion has steadily grown from 8% in 2012 to 11% in 2019. Now we will see what will be the impact COVID-19 will have on these numbers in 2020 and following years. Source dataset: [lfsa_ehomp](#) from [Eurostat](#).

The People Aspect of Switching to Remote Work Environments

Although a focus on technology is vital to efficient remote operations, streamlining video conferences and holding perfect meetings might lead companies to lose track of what we call the 'people aspect'. We define this as the employee experience at the individual and team member level. Now, more than ever, team leaders need to set clear expectations, define roles and objectives with greater clarity than before; such as scheduling frequent check-ins with the team and team members, and even over communicating to make sure conflicts are resolved early. Employees look to team leaders and managers as role models for best practices - be it work-life balance, giving timely feedback, or using tools according to company policy. To track these changes and manage them successfully, companies need valid and reliable metrics that provide them with insights into how they are performing in their efforts to implement new ways of collaboration - and how it impacts their employees. So the question is, how can both major aspects of the shift outlined above (online collaboration productivity and employee experience of working from home) be measured?

Active and Passive Listening to Employees

In general, there are two ways one can listen to employees and measure changes in their attitudes and behaviors related to working from home (WFH). One can use **active or passive data** that both have their own pros and cons. Passive data can be defined as data that already exists within the company, such as calendar events, email logs or chat logs., i.e. traces of employees' activity on various collaboration platforms that enable employees to work from home. The major advantage of passive data is that it doesn't require employees to submit their own data inputs. Thus employees are not burdened with additional work, which is important especially in these days when employees are often forced to do their standard job under non-standard circumstances. Its major disadvantage is that it can miss contextual information and the need to gain consent from employees about the way their data is used. The former can be to some extent compensated by collecting some active data. To obtain it, employees need to be surveyed and explicitly provide information about their attitudes and behaviors. Its major advantage is the possibility to gain more nuanced information, nevertheless, it requires a lot of extra work, as well as ensuring a high response rate among employees to get a dataset suitable for analysis.

Given the pros and cons of these types of data, the best practice is to combine passive and active data to gain a comprehensive understanding of what is going on in the company to identify patterns of collaboration between employees (Killian & Goel, May 2020). At Time is Ltd., we focus primarily on helping organizations utilize passive data from various collaboration platforms - be it calendars, emails, Slack, Google Chat, Jira, or Google Docs - for more effective people management. This is the reason we demonstrate the usage of passive data exclusively in the context of managing the shift to WFH in this whitepaper. Specifically, **we present a series of metrics of calendar usage that are used by our clients for tracking and managing their transition to remote work arrangement.**

From Hypotheses to Metrics

A crucial part of any people analytics project is the formulation of clearly stated, testable and business relevant hypotheses that guide subsequent data gathering, data analysis, interpretation and follow-up action plans. This is also true in the case of our research which is intended to help our clients better manage ongoing changes in employee collaboration. When our clients started to tackle the challenges related to WFH we formulated several **hypotheses regarding the changes we may observe in calendar usage which would be indicative of un/desirable consequences of shifting from on-site work to a remote work arrangement.**

Below in [Table 1](#) there are 8 listed specific hypotheses together with the business reasoning behind them and corresponding metrics used by companies for tracking their transition to a more remote work arrangement.



What we may observe?	Why is it important to know?	Metrics
1. There will be less time spent in meetings.	With lacking technological infrastructure, employees may not have the necessary tools for coordination.	The average number of man-hours spent in meetings per employee.
2. Meetings will be more frequent, shorter, and involve fewer people.	Effective coordination between employees under non-standard circumstances requires more frequent and shorter meetings with relevant colleagues.	The average number of meetings per employee, average length of meetings, and average meeting size.
3. More meetings will be planned last minute, with a low decline rate.	Non-standard circumstances require employees to be more flexible in their behavior.	The proportion of meetings planned less than 24 hours ahead, and the meeting decline rate.
4. More ad hoc meetings will be planned.	Non-standard circumstances require employees to be more flexible in their behavior.	The proportion of ad hoc (non-recurring) and recurring meetings.
5. In-team coordination will increase, moving swiftly to online.	Non-standard circumstances related to the transition to WFH will require employees to coordinate more often with their teammates via online platforms.	The proportion of types of meetings (in-team, cross-team, external), and the proportion of in-team meetings conducted online.
6. 1:1 meetings between superiors and their direct reports will decrease and not move online.	WFH can make it more difficult for superiors to conduct regular 1:1 meetings with their direct reports that fulfill an important development, engagement, retention and coordination function.	The average number of 1:1 meetings between superior and direct reports per employee.
7. Superiors will need to be present in every online meeting even though there was less micromanagement before.	Non-standard circumstances related to the transition to WFH will require management to be more involved in employees' day-to-day tasks.	The proportion of supervised meetings (with top management members or direct superiors).

What we may observe?	Why is it important to know?	Metrics
8. Meetings will spill over to employees' free time, starting earlier and ending later in the day.	With WFH, there is a higher risk of employees having problems with separating work-time and personal time which may have a detrimental effect on employee engagement and well-being.	The proportion of meetings conducted out of standard working hours.

Table 1: List of hypotheses about consequences of WFH for employees' calendar behavior, their business relevance and corresponding metrics used for their tracking.

The Sample of Companies Under Study

The dataset behind the analyses presented consists of **anonymized calendar data from 11 mid-sized, tech-oriented companies based in the Central and Eastern Europe (CEE) region**. On average, we analyzed aggregated data related to 31,602 unique calendar events per month and 6,609 employees per month. Some of the studied companies were well prepared for WFH - we call this group born digital (regular users of Google solutions who also tended to use Slack as part of their daily work even before March) - while others were rather recent IM/online conference adopters (implementing solutions such as MS Teams or Cisco Webex) where on-site work was predominant, also because of their industry (such as FMCG, telecommunications, and others).

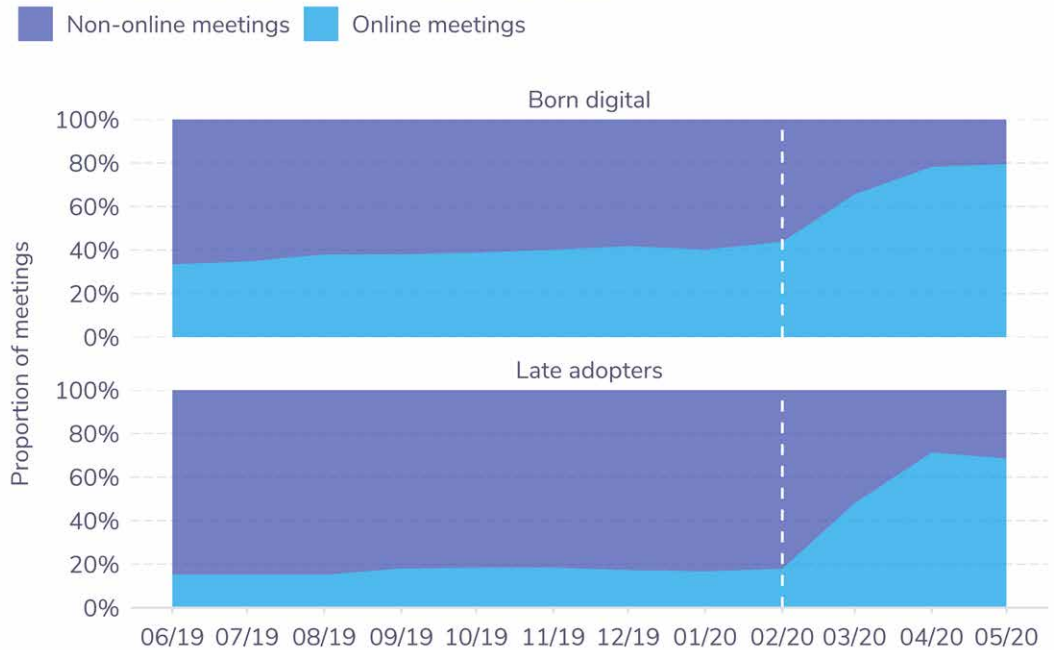
The difference between these two groups of companies is captured in Graph 2. It shows the proportion of online and non-online meetings being conducted in the studied companies on a monthly basis. It's apparent from the graph that the born digital companies were utilizing online meetings frequently and well before the COVID-19 crisis fully entered the scene (March 2020 in CEE region) - about 40% of all meetings were already conducted online in these companies. Compared to the late adopters that used online meetings before the crisis less than 20% of the time.

Nevertheless, both groups reacted equally to the onset of the crisis by shifting quickly to the digital workplace that reached 80% and 70% in the case of born digital and late adopters, respectively. In the context of the return to the "new normal" it is also noticeable that the groups differ by the proportion of online and non-online meetings metric in the last month (May 2020) when COVID-19-related restrictions started to be relaxed in the CEE region. In the case of born digital companies, there is still a slight increase in proportion of online meetings, while late adopters had an apparent decrease in this metric. It will be interesting to watch how the proportion of online and non-online meetings will evolve during the upcoming months as more and more COVID-19-related restrictions will be relaxed and how the "new normal" will look like for different types of organizations.

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Proportion of online and non-online meetings by type of company

Monthly snapshots between June 2019 - May 2020



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

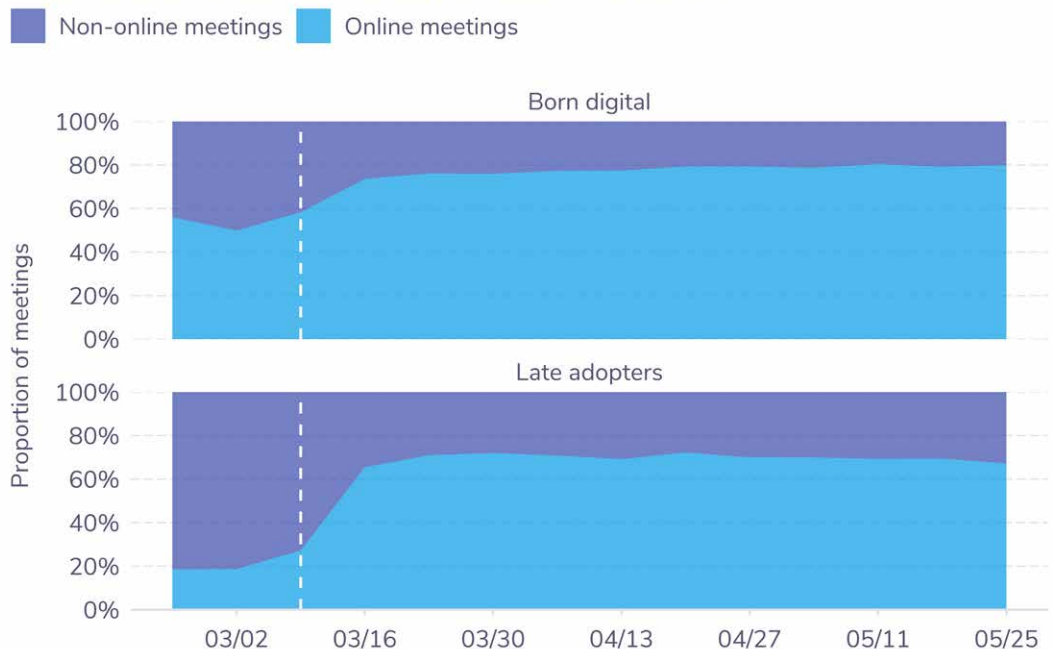
Graph 2: The graph compares born digital companies (upper part of the graph) with late adopters (lower part of the graph) in the proportion of meetings that were conducted online/offline over time between June 2019 - May 2020. The white dashed vertical line indicates the last month when companies were functioning under normal circumstances not affected by COVID-19 pandemic.

We can observe interesting differences between these two groups also in their early reaction to the COVID-19 crisis at the turn of February and March when using weekly instead of monthly data. Graph 3 shows the very same information as Graph 2 but now on a weekly basis. We can see that while born digital companies were already having roughly 60% of their meetings online two weeks before government restrictions were put in place, late adopters were still experiencing their usual 20% proportion of online meetings. These numbers are in line with the hypothesis that born digital companies are better prepared for a shift to a remote work arrangement in comparison with late adopters.

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Proportion of online and non-online meetings by type of company

Weekly snapshots between February 24, 2020 - May 25, 2020



Sample: 7075 employees and 8741 unique calendar events on average per week aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 3: The graph compares born digital companies (upper part of the graph) with late adopters (lower part of the graph) in the proportion of meetings that were conducted online/offline across time between weeks February 24, 2020 - May 25, 2020. The white dashed vertical line indicates the week when the the most serious governmental COVID-19-related restrictions were put in place.

Verification of the Hypotheses

Now we turn to analyzing how the companies in our sample “performed” in our metrics and what it says about how they handled the new, non-standard circumstances related to the COVID-19 crisis.

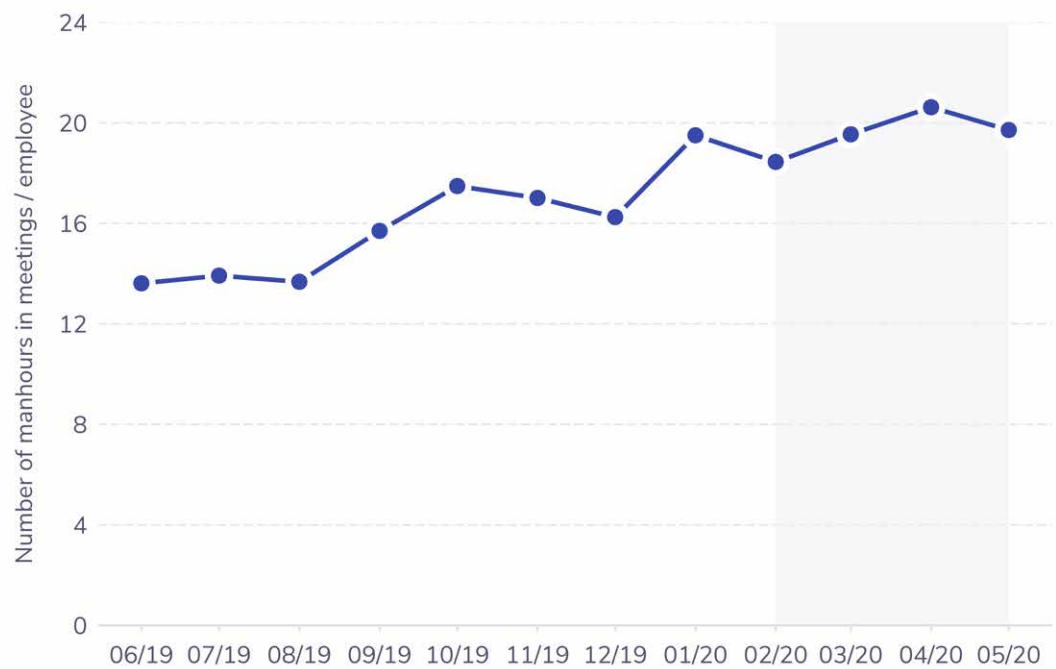
Hypothesis 1: There will be less time spent in meetings.

Contrary to our original expectations, we saw that employees tended to spend more time in meetings as work moved to remote arrangements (see Graph 4). As shown in the previous section, there seemed to be little if no issues at all related to the lack of technological preparedness. The companies in our sample took advantage of the technology available and actually increased their meeting presence, likely due to the necessary coordination during these uncertain and abnormal standards of working conditions. In April 2020, the average number of manhours in meetings per employee reached 20.6 hours, higher than at any previous point in time, even taking into account January which is typically characterized by high meeting activity due to yearly planning.

Nevertheless, we do see a slight decline in meeting hours starting in May when most companies in our sample allowed their workforce to return to their offices - it remains to be seen whether this trend downwards towards the original levels observed will continue or stabilize.

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Average number of manhours spent in meetings / employee



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 4: The graph shows the development of time (man-hours) spent in meetings per employee. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

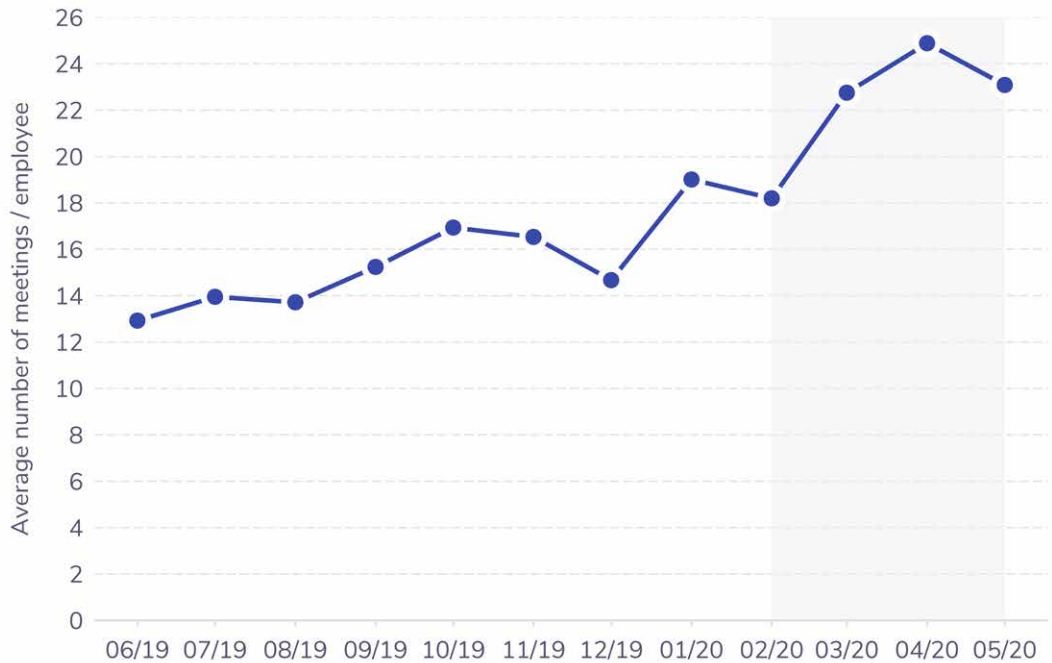
Hypothesis 2: Meetings will be more frequent, shorter, and involve fewer people.

With going remote, we expected companies to exhibit behavior traditionally associated with agile structures designed to navigate uncertainty and market dynamics. In difficult to predict business environments, people have to meet often to keep track of the changing landscape. Because these meetings are frequent, they do not have to last as long. At the same time, a higher number of participants may be a potential factor in making such dynamic meetings less efficient, which is why we predicted companies would try to keep them as small as possible.

The frequency part of our hypothesis was validated in the data (see Graph 5). Employees began to attend many more meetings than before - the sharpest rise (more than 25%) - was observed between February and March. As is the case in meeting hours, a slight decline took place again in May.

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Average number of meetings / employee



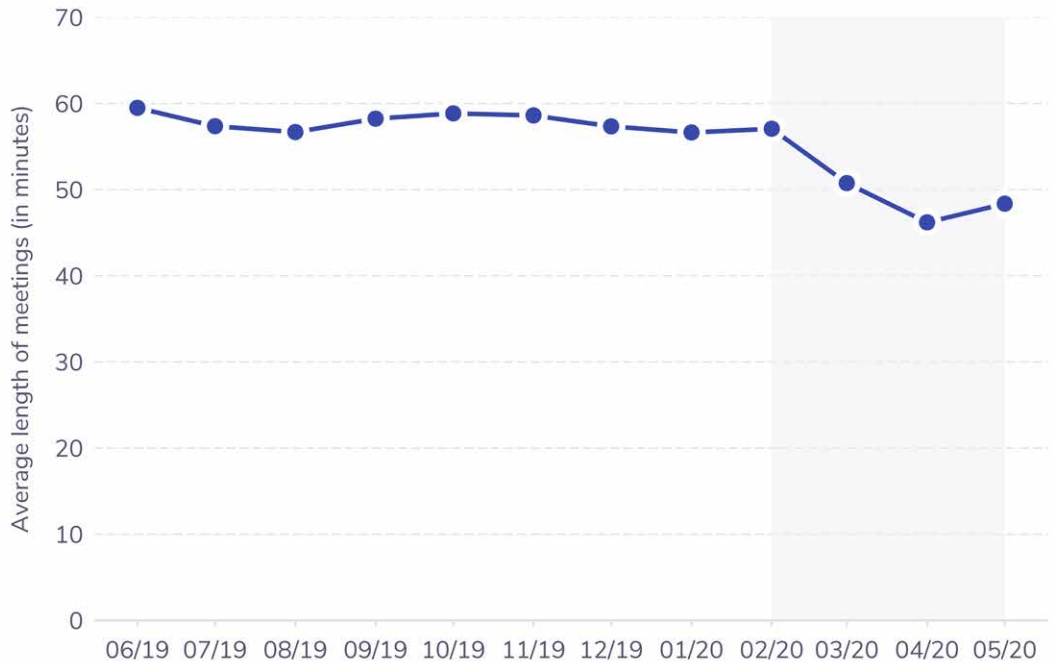
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 5: The graph shows the development of the number of meetings per employee. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

The hypothesis was also correct in predicting the decrease in the average length of meetings. In Graph 6 there is a clear downward trend in meeting length starting in February, when the average meeting duration was still around the consistent average of 57 minutes, and reached its minimum in April when the average meeting length dropped to 46 minutes. As in the case of previously discussed metrics, we can observe a slight trend in the opposite direction during the month of May.

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Average length of meetings



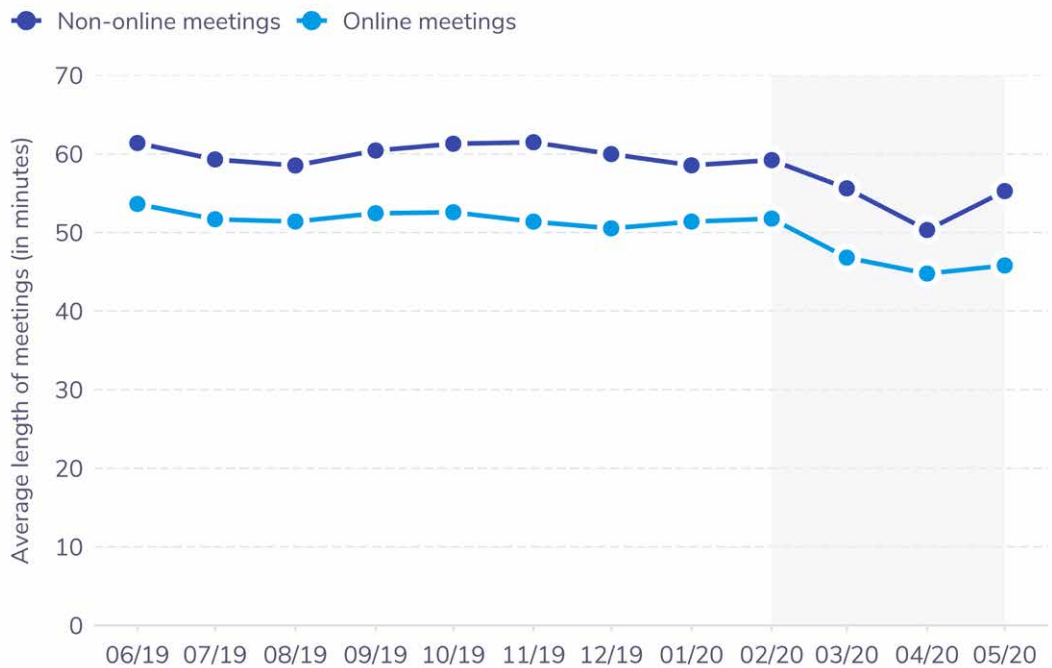
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 6: The graph shows the development of the average length of meetings. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

The shortened duration of meetings was largely driven by the switch to more agile online meetings that are shorter on average than non-online meetings in the long-term (see Graph 7). Online conferences became much shorter in March and non-online meetings (on-site meetings or other events in which we have not detected an online conference link) almost caught up with them in terms of decreased meeting length in April. We can also see that the previously mentioned upswing in meeting length in May was mostly driven by non-online meetings. Our expectation is that online meetings will stay shorter (under 50 minutes) and therefore the average length of all meetings will not revert back to levels observed before February 2020.

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Average length of online and non-online meetings



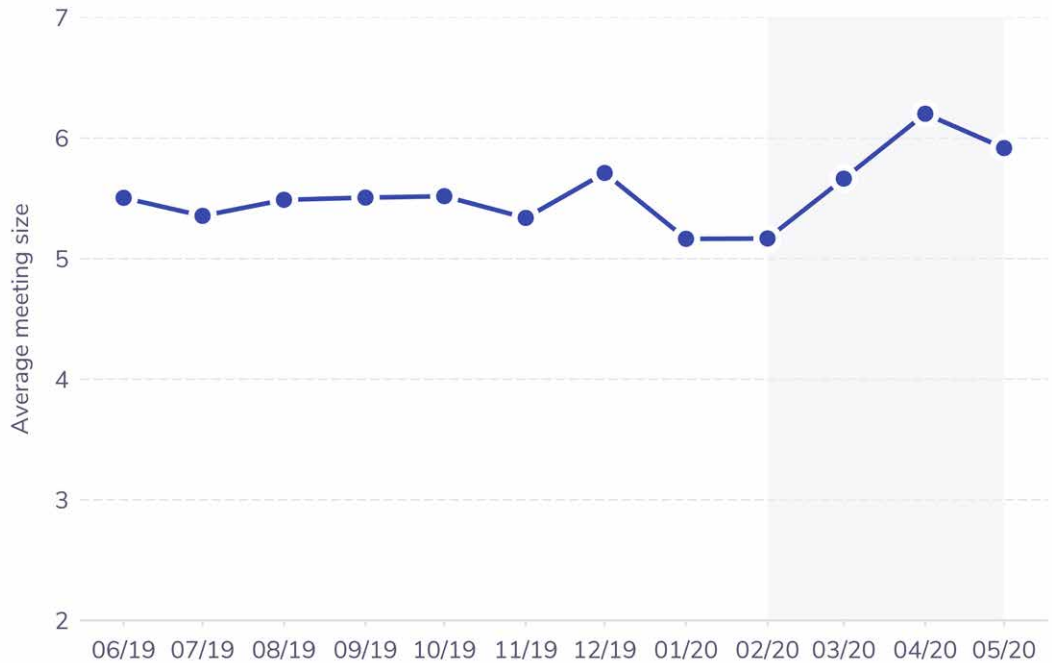
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 7: The graph shows the development of the average length of online meetings and non-online meetings (events in which an online conference link was not detected). The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

While meetings did become more frequent and shorter, there was no reduction in meeting size - in fact, meetings started to involve more and more people (see Graph 8). As will be shown in subsequent charts, in-team meetings were the ones that increased the most in proportion to other types of meetings, and the rise in meeting size likely reflects this increased need for team coordination. However, various studies (Hackman & Vidmar, 1970; Steiner, 1972; Hackman, 2002; Stewart, 2006; Hülshager, Anderson, & Salgado, 2009; Wheelan, 2009; Aubé, Rousseau, & Tremblay, 2011) show that optimal meeting size should remain below 9 people to reach maximum efficiency, which means that any upward development in meeting size should be closely watched.

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Average meeting size



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

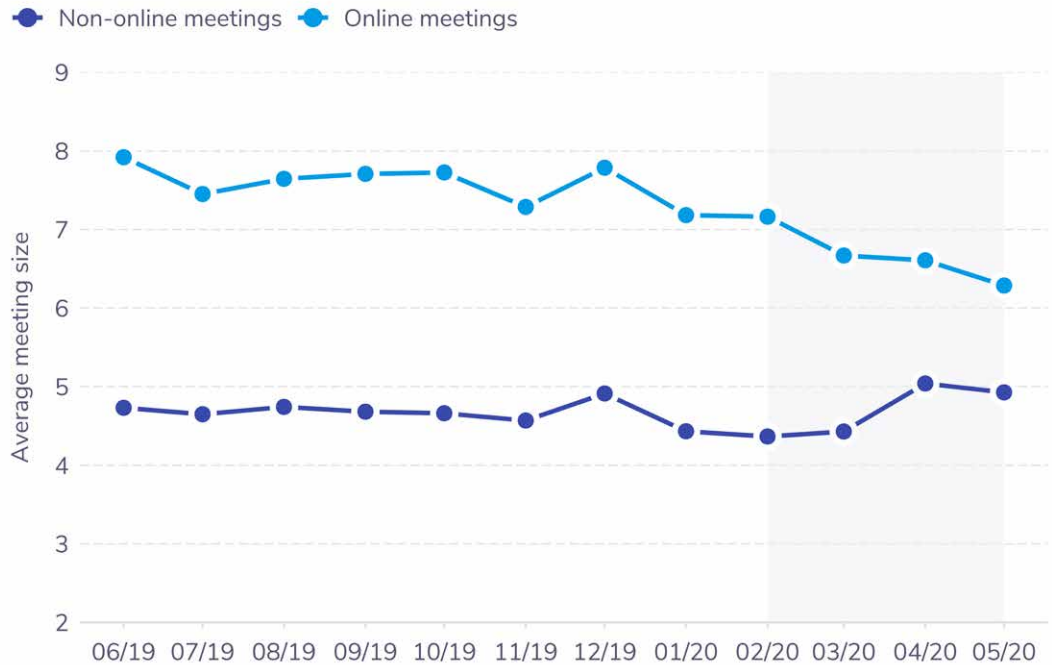
Graph 8: The graph shows the development of the average number of participants (people who were invited to the meeting, regardless of whether they accepted the invitation). The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

An interesting pattern emerges when looking at online and non-online meetings. We discovered that while online meetings follow the predicted pattern of fewer people attending since February, and in fact their size continues to decrease further, they tend to be larger than non-online meetings, and their increased presence drives the average size upward (Graph 9). The number of attendees of non-online meetings was much smaller to begin with (around 4 participants) and they are actually increasing in size, but this contribution to the overall average is small.

In the future, we expect online meetings to remain larger than non-online meetings - however, we have to see whether meetings that currently take place offline will move online and drive the online meeting size up again. One such kind of meeting might be a company-wide all-hands session that will now in many cases have to be organized for a mix of on-site and remote workforce - an online form might therefore be preferable. A related cause is that, psychologically and also organizationally, it is easier to invite a large number of people to online meetings while large non-online events are much more difficult to plan.

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Average size of online and non-online meetings



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

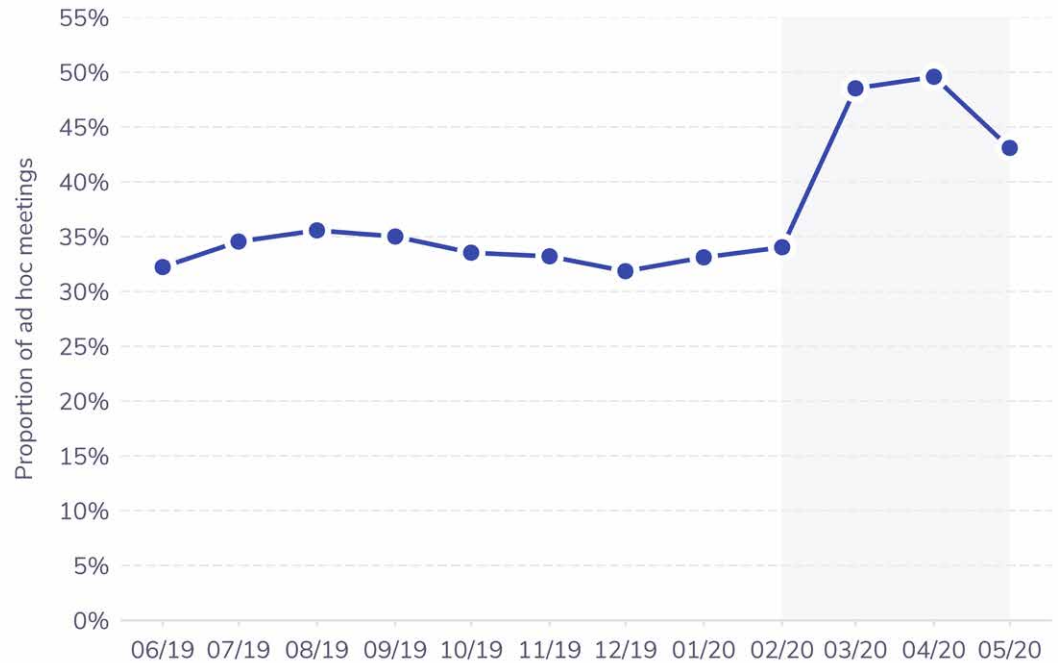
Graph 9: The graph shows the development of the average number of participants (people who were invited to the meeting, regardless of whether they accepted the invitation) in online meetings and non-online meetings (events in which an online conference link was not detected). The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

Hypothesis 3: Meetings will be planned more last minute, with a low decline rate.

Meeting planning has undergone one of the most dramatic changes we have seen in our data. Typically, it is recommended to organize meetings with sufficient time for all attendees to prepare for the agenda - meetings planned with little notice should be minimized unless participants need to meet to discuss approaches in a dynamic and changing environment. The COVID-19 crisis was precisely such a situation and the companies in our sample reacted to it swiftly as they went from approximately a third of meetings organized a day in advance to almost half of all meetings, with the sharpest delta between February and March (see Graph 10 below). By May companies began to plan more long-term again. We expect this pattern to repeat itself with any potential crises to come, however, stable periods should bring the proportion of late notice events back to normal.

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Proportion of ad hoc meetings planned less than 24 hrs ahead



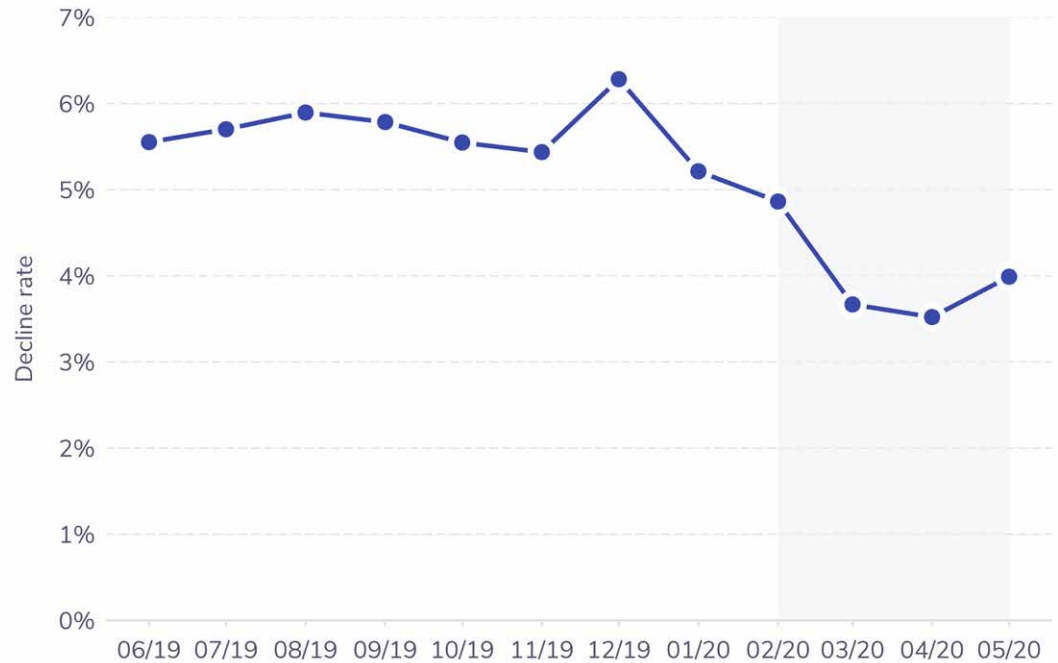
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 10: The graph shows the development of the proportion of ad hoc (non-recurring) meetings planned less than 24 hours in advance. Updates to meetings are not included in the definition. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

As a consequence of the need for dynamic planning, it is logical that meetings will be declined to a lesser extent even though the notice given is shorter. Overall, the decline rate for the companies in our sample is low - it is more common to accept meetings or to give no response at all. However, there was a 29% drop in the decline rate between February and April which is a further sign of the unstable business context and need for company coordination (Graph 11).

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Meeting decline rate



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

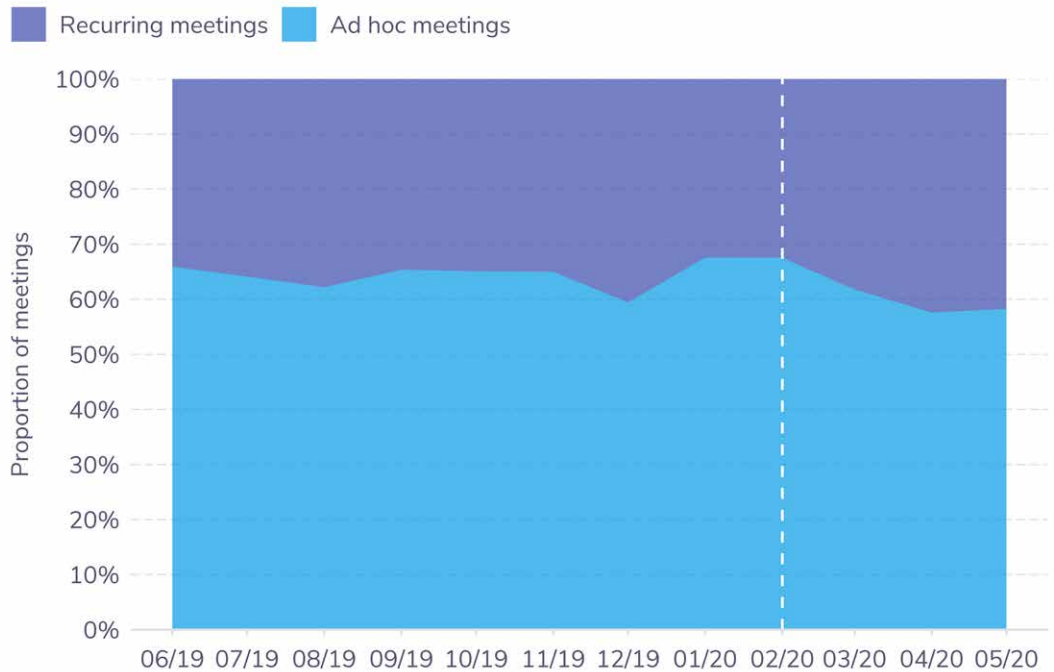
Graph 11: The graph shows the development of decline rates (negative responses to meeting invitations). No action on the employee's part is not counted as a decline. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

Hypothesis 4: More ad hoc meetings will be planned.

An interesting finding is related to the proportion of ad hoc meetings. At the outset, we thought that ad hoc meetings would dominate the COVID-19 meeting landscape, driven by the need to communicate in a shorter time frame (as we saw earlier, ad hoc meetings were not planned with much time in advance), without having to involve many people or set up repeating processes. The opposite can be seen in the data (Graph 12): the reaction to instability was to create more stability and more recurring meetings (check-ins, stand-ups and status updates) took place. While recurring meetings can be an important tool in company coordination, we recommend that they have a clear agenda and only those required to attend are invited - it is not clear if this was the case for our companies, but the larger size of meetings suggests otherwise.

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Proportion of ad hoc and recurring meetings



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

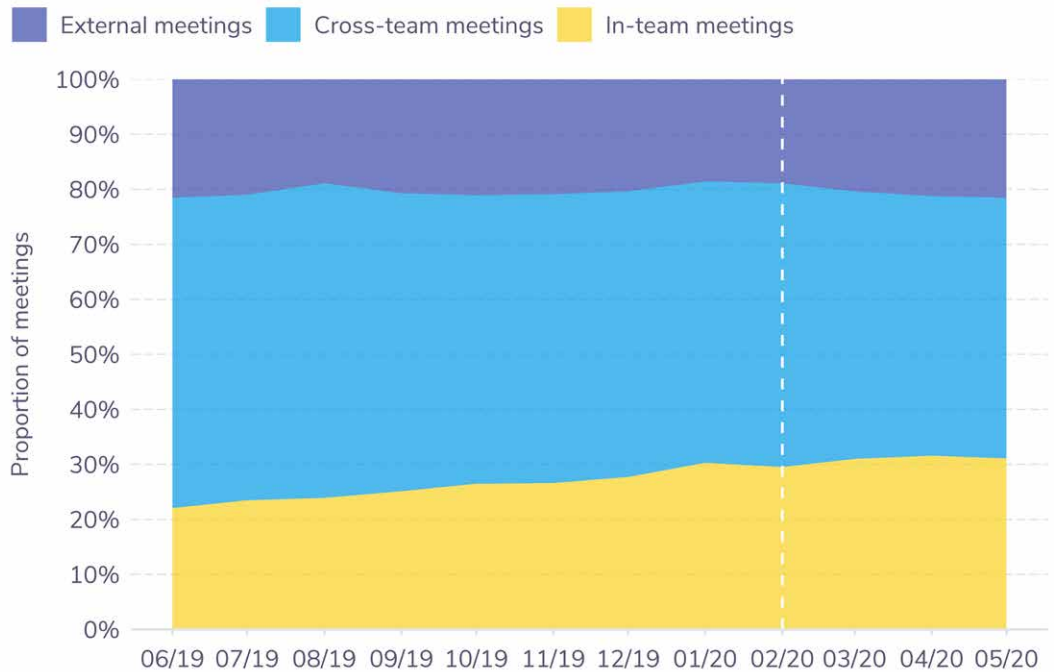
Graph 12: The graph shows the development of the proportion of ad hoc (non-recurring) and recurring meetings. The white dashed vertical line indicates the last month when companies were functioning under normal circumstances not affected by COVID-19 pandemic.

Hypothesis 5: In-team coordination will increase, moving swiftly to online.

Even though we expected the overall meeting time to decrease (which turned out to be incorrect), we predicted that one area would be an exception - in-team coordination. Especially in smaller teams, collaboration is covered by simple co-location - team members in many situations do not need to organize meetings because they work together and solve issues together on a daily basis, which might not be the case with meeting colleagues from other departments. With COVID-19, this manner of working was suddenly not possible and in-team meetings started to make their way into employee calendars (see Graph 13).

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Proportion of types of meetings



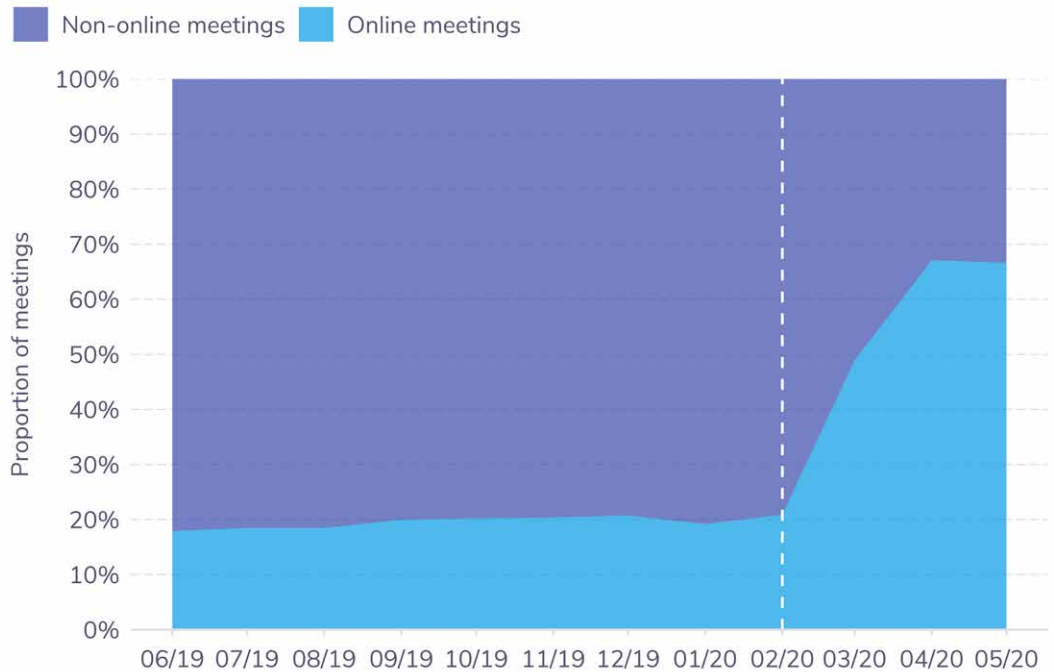
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 13: The graph shows the development of the proportion of different meeting types: in-team meetings (defined as a group of employees with the same superior), cross-team meetings (defined as meetings between colleagues who have a different superior) and external meetings (defined as meetings between employees of one company and another party). The white dashed vertical line indicates the last month when companies were functioning under normal circumstances not affected by COVID-19 pandemic.

Although the increase in in-team collaboration was not dramatic, a different picture emerges when looking at the manner of conducting these meetings. In-team meetings are, for reasons mentioned above, mostly physical - before the pandemic, less than a fifth was held online - but within one month, this number already doubled. As of May, more than two thirds of in-team meetings take place online, a trend which so far shows no signs of abating.

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Proportion of in-team meetings conducted online



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

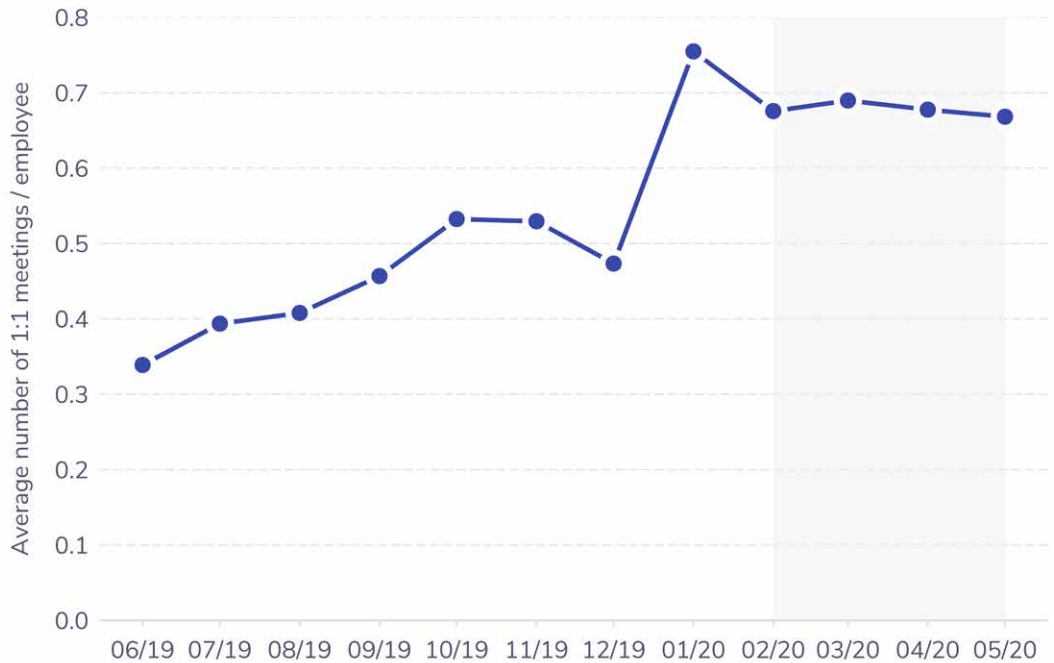
Graph 14: The graph shows the development of the proportion of in-team meetings (defined as a group of employees with the same superior) carried out as online meetings or non-online meetings (events in which an online conference link was not detected). The white dashed vertical line indicates the last month when companies were functioning under normal circumstances not affected by COVID-19 pandemic.

Hypothesis 6: 1:1 meetings between superiors and their direct reports will decrease and not move online.

Meetings between superiors and direct reports fulfill an important developmental and coordination function. Various sources (Bárcenas, 2018; Tormey, n.d.) recommend organizing at least one such meeting once every two weeks. However, 1:1 meetings are often the first ones to get cancelled when there are more pressing matters to attend to, leading us to hypothesize that these meetings would fall victim of the changes in company circumstances due to COVID-19. In fact, we saw very little change in the observed period (Graph 15) - 1:1 meetings on average do not meet the recommended benchmark, but this was not impacted by the switch to working from home but more likely due to other factors such as not giving enough importance to these meetings by both employees and their managers. As the number of these meetings hardly changed, we can at least conclude they continue online.

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Average number of 1:1 meetings between superior and direct report / employee



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

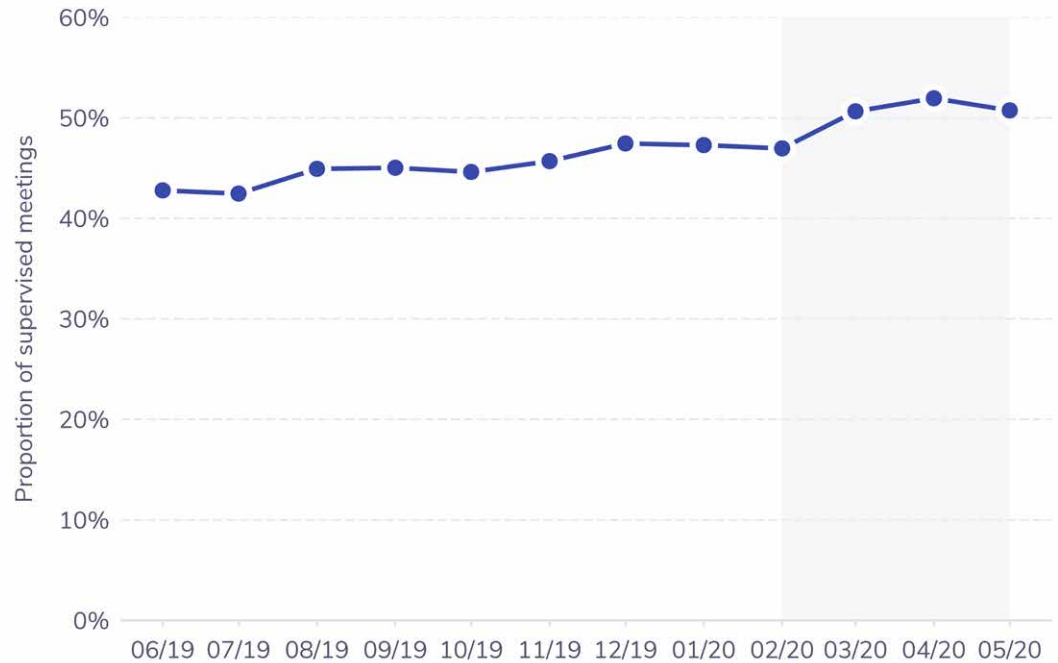
Graph 15: The graph shows the development of the number of 1:1 meetings between superiors and direct reports per employee. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

Hypothesis 7: Superiors will need to be present in every online meeting even though there was less micromanagement before.

With the switch to remote work, our expectation was to find more evidence of micromanagement in the data, defined as supervisor or manager presence in employee meetings. In fact, their presence did increase (Graph 16), but what is actually more interesting is the overall trend of micromanagement becoming more common for the companies in our sample in the last 12 months. Switching back to normal business circumstances will likely not have a large impact on such practices as companies have swiftly moved from offline to online mode. However, we recommend that companies keep a close watch of this trend as micromanagement can become demotivating for employees, impacting their overall experience and satisfaction at work.

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Proportion of supervised meetings



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

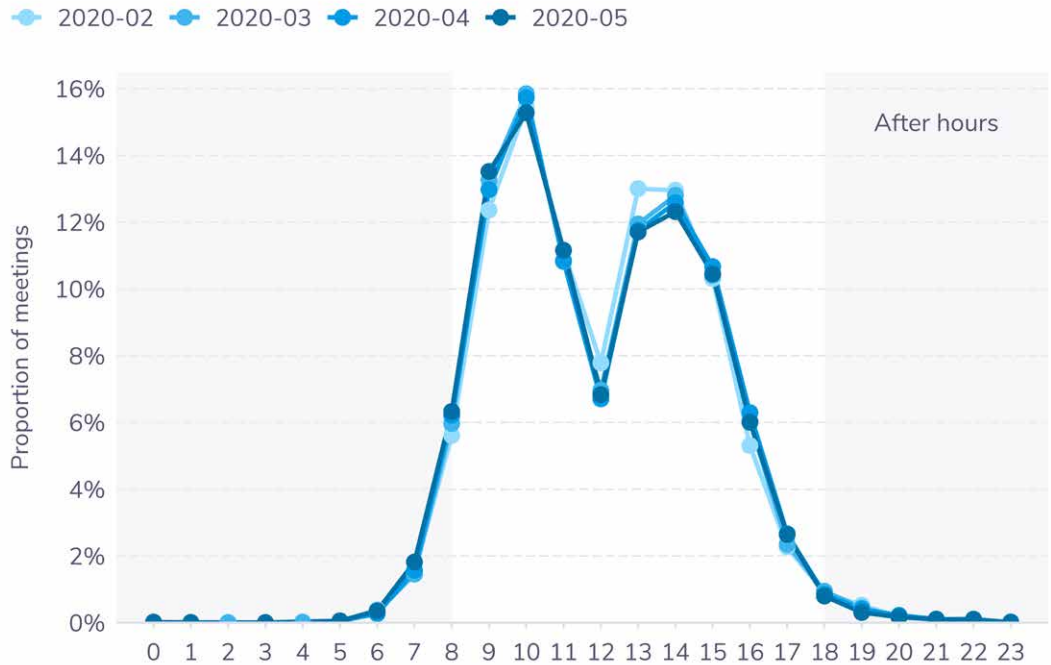
Graph 16: The graph shows the development of the proportion of micromanaged meetings, defined as meetings in which the employee superior was present. The grey area indicates the 3 months when companies were affected by the COVID-19 pandemic and had to function under changed circumstances.

Hypothesis 8: Meetings will spill over to employees' free time, starting earlier and ending later in the day.

According to Remotework2020's survey among remote workers in 2020 (Remotework2020, 2020), one of the biggest challenges these remote workers are facing is the ability to separate work time and personal time that is related to higher risk of burnout (Moss, November 2018). They found that 27% of these types of workers perceive this - besides fighting loneliness - as the biggest challenge of working remotely (Remotework2020, 2020). For this reason we were expecting that with going remote, employees will organize meetings more often out of standard business hours (here defined as time between 8 am and 18 pm). However, Graph 17 clearly shows that employees have not changed their behavior in terms of the time slots in which they usually planned their meetings. In all four months that are displayed in the graph, the proportion of meetings that were started outside of standard business hours was about 3.7%.

Time is Ltd.

Meeting distribution during the day



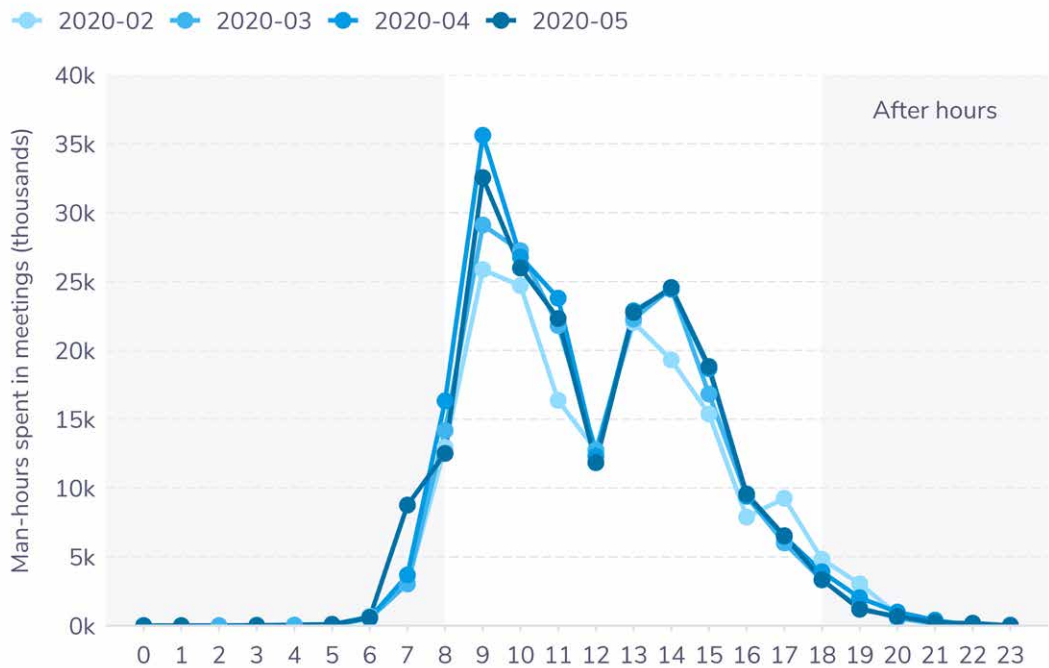
Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

Graph 17: The graph shows the distribution of meetings as a function of dayhours during which meetings were started in the months between January and May 2020. The standard business hours are indicated in white and are defined as the time between 8 am and 18 pm.

Even when looking at the overall number of man-hours spent in meetings, the observed increase in this metric in the months after February is located almost exclusively within standard business hours (see Graph 18). So based on available calendar data, it seems that on average employees from the companies under the study prevented meetings from spilling over into their free time.

Time is Ltd.

Man-hours spent in meetings during the day



Sample: 6609 employees and 31602 unique calendar events on average per month aggregated across 11 mid-sized, tech-oriented companies based in the CEE region.

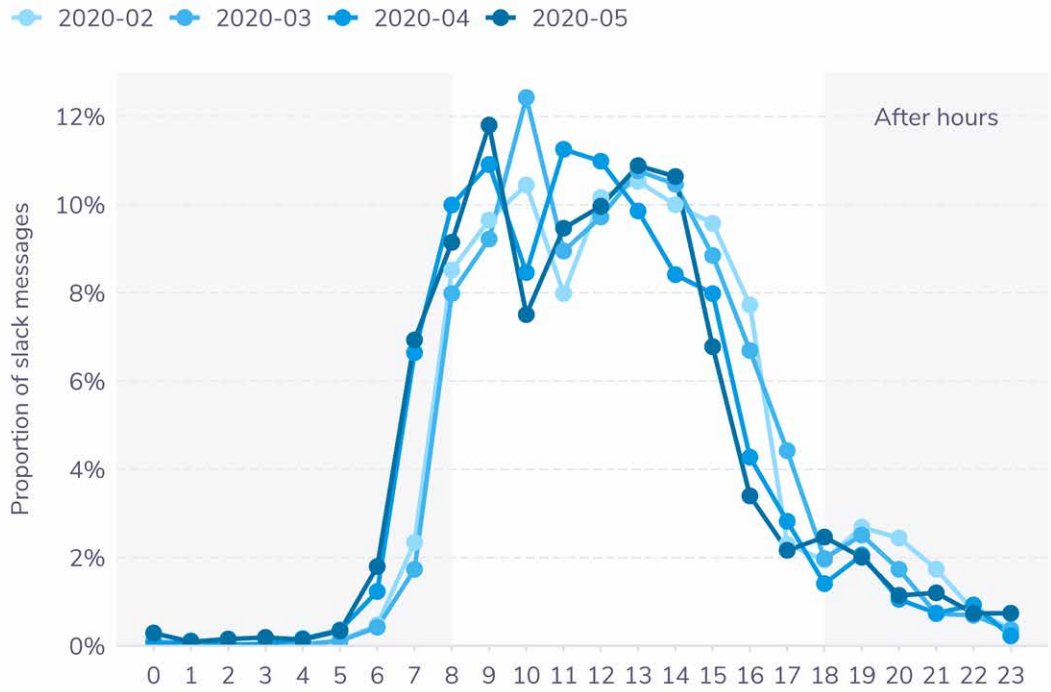
Graph 18: The graph shows distribution of man-hours spent in meetings as a function of dayhours during which meetings were started. The standard business hours are indicated in white and are defined as the time between 8 am and 18 pm.

We can speculate and hypothesize that meetings as a synchronous type of collaboration are less prone to the problem with work time and personal time separation, and that this challenge will be more visible in usage of more agile and asynchronous collaboration tools like email or Slack. Unfortunately, we do not have such a comprehensive dataset for emails and Slack as we do for calendar data. As a result, testing this hypothesis is less straightforward. Nevertheless, for this purpose we can at least use data from our own company that will bring some relevant, however weak evidence for the case.

And indeed, Graph 19 clearly shows that the start of work-time - as measured by written Slack messages - has shifted in Time is Ltd. (TiL) to more early hours in the months after February, probably due to savings in commute time. This change was accompanied by the relative decline in Slack activity in the late afternoon and night hours as people probably finished their tasks sooner due to an earlier start of their working day. This shift may have a positive effect on employees' work-life balance. Nevertheless, the fact that the overall proportion of Slack messages written out of standard business hours has increased after February - while in February this proportion was about 13%, and in April and May it rose to about 15% and 18%, respectively - leads to a precautionary tale regarding the risk of burnout. This also provides some evidence that these types of collaboration tools may more easily lend themselves to problems with separating work time and personal time. We will get back to this topic in some of our next whitepapers as we gather this type of data from a larger sample of companies.

Time is Ltd.

Slack message distribution during the day in Time is Ltd.



Sample: On average, 9796 Slack messages written by 38 Time is Ltd. employees per month.

Graph 19: The graph shows distribution of Slack messages in Time is Ltd. company as a function of dayhours during which these messages were written. The standard business hours are indicated in white and are defined as the time between 8 am and 6 pm.

How to Put the Data into Action

Although the data and insights presented above are interesting on its own, one can legitimately ask “So what?”. By themselves, these insights are rather worthless because data and the insights inferred from it have value only through their potential to prompt actions. That is why it is vital to start people analytics projects with hypotheses that are motivated by specific business concerns or opportunities. Such an arrangement ensures that one will gather only relevant data and that the insights inferred from the data will be able to inform actions with real business impact.

Table 2 below recreates the content of Table 1 with 8 specific hypotheses and business reasoning behind them - but instead of corresponding metrics, in the third column it now lists possible actions management can take in situations (when tracked metrics start to move in the undesirable direction). These actions quite straightforwardly follow from the business reasoning that informed the individual hypotheses.

What we may observe?	Why is it important to know?	Metrics
1. There will be less time spent in meetings.	With lacking technological infrastructure, employees may not have the necessary tools for coordination.	Improving technological infrastructure that enables remote work, such as video-conferencing solutions or collaboration platforms.
2. Meetings will be more frequent, shorter, and involve fewer people.	Effective coordination between employees under non-standard circumstances requires more frequent and shorter meetings with relevant colleagues.	Reminding employees of best practices leading to effective and efficient meetings. Providing team members with benchmarks from previous months to better calibrate their current behavior. Coaching employees in agile working methods.
3. More meetings will be planned last minute, with a low decline rate.	Non-standard circumstances require employees to be more flexible in their behavior.	As above, an agenda for all meetings to ensure employees are prepared.
4. More ad hoc meetings will be planned.	Non-standard circumstances require employees to be more flexible in their behavior.	Making sure employees attend 10-35% of recurring meetings that are needed for coordination.
5. In-team coordination will increase, moving swiftly to online.	Non-standard circumstances related to the transition to WFH will require employees to coordinate more often with their teammates via online platforms.	Reminding team leaders that non-standard circumstances require more frequent coordination of team members. Providing team leaders with benchmarks from previous months to better calibrate their current behavior.
6. 1:1 meetings between superiors and their direct reports will decrease and not move online.	WFH can make it more difficult for superiors to conduct regular 1:1 meetings with their direct reports that fulfill an important development, engagement, retention and coordination function.	Implementing a policy of minimally two 1:1 meetings per month and employee. Providing managers with recommendations and guidance regarding the areas being covered during 1:1 meetings.

What we may observe?	Why is it important to know?	Metrics
7. Superiors will need to be present in every online meeting even though there was less micromanagement before.	Non-standard circumstances related to the transition to WFH will require management to be more involved in employees' day-to-day tasks.	Reminding managers that under non-standard conditions their people may need more guidance, support, vision etc. and that they should meet with them more frequently than in previous months, but not micromanage them in every situation. Providing managers with benchmarks from previous months to better calibrate their current behavior.
8. Meetings will spill over to employees' free time, starting earlier and ending later in the day.	With WFH there is a higher risk of employees having problems with separating work-time and personal time which may have a detrimental effect on employee engagement and well-being.	Treating overtime as the exception and not the rule. Capping overtime. Ensuring that people have the right equipment and resources. Trying flexible work schedules. Matching staffing to demand.

Table 2: List of hypotheses about the consequences of WFH for employees' calendar behavior, their business relevance, and corresponding possible actions.

To support users of our reporting platform in implementing new actions and policies to shape behavior of their employees in the desirable direction we have designed a series of so called **alert views**. They have been developed in a user-friendly way to inform the user - be it CHRO, CIO, HR business partner or tribe lead - what changes have happened in individual teams or departments during the last month and whether these changes that took place were in the desirable or undesirable direction. Based on such information, management can take actions that will be targeted at specific issues in specific teams or departments.

For illustration, in Figure 1 there is a screenshot of an alert view that tracks metric related to 1:1 meetings between superiors and their direct reports. A quick overview of what is going on in the company can be gained from the Sociomap¹ on the right. The distances between 1 departments on the Sociomap refers to the amount of time people from individual departments spend together in meetings - the closer they are, the more intensive their collaboration becomes through meetings. Nevertheless, what's more important here is the color-coded height that represents the category into which department belongs according to the given size and direction of change in the tracked metric. In this case, the average number of 1:1 meetings between superiors and their direct reports.

The most noticeable departments are those located in the blue or red areas as they represent situations when a department should be watched (because it may need support as it struggles with moving the needle or it moves in the opposite direction than would be desirable) or praised and rewarded (because it is changing or keeping its behavior in

¹ Sociomapping is an ONA (Organizational Network Analysis) tool that provides a specific graphical interface for interpreting team relationships based on the number of interactions (Bahbouh, 2004, 2012; Höschl, 2006; Rozehnalová, 2008).

the desired direction), respectively. In the case of departments, green areas suggest that there is not enough sufficiently strong evidence to prompt a specific action. If more details are needed, the user can inspect the table view in the bottom left where basic descriptive statistics are displayed (information about the value of tracked metric in the last month, size of change in the month-to-month comparison and trend line for the whole last year) or she can go through several drill-down views that provide additional context to the basic findings (see Figure 2 for illustration).



Figure 1: Screenshot of alert view from Time is Ltd. reporting platform that is intended to track frequency of 1:1 meetings between superiors and their direct reports. For more details see the main text above.

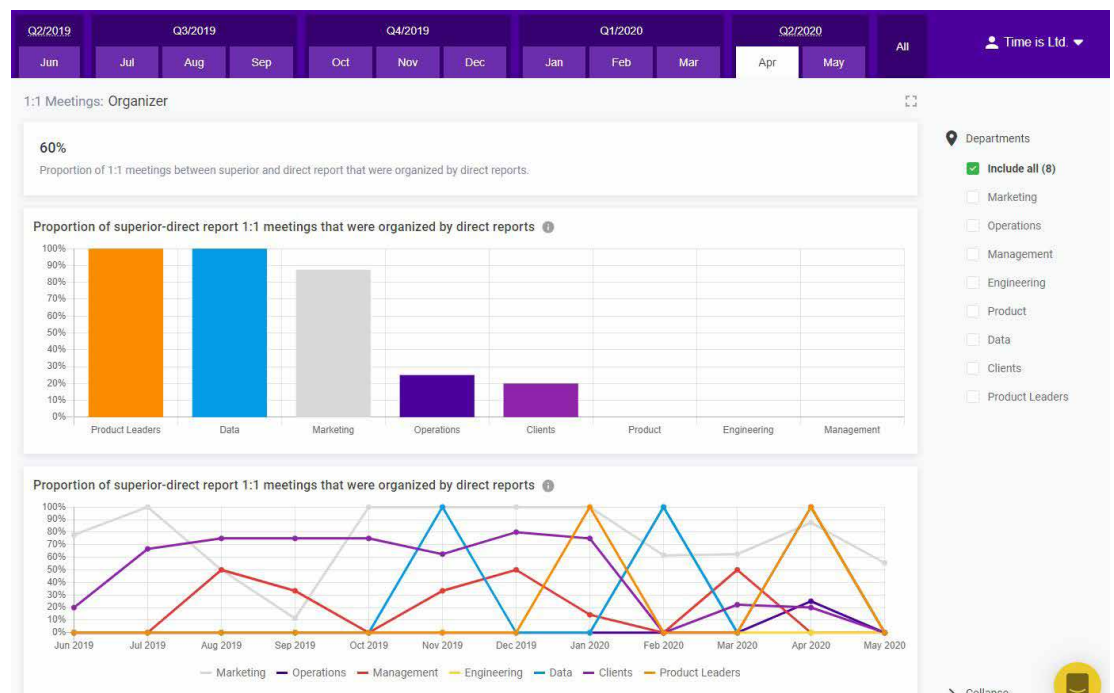


Figure 2: This is a screenshot of the drill-down view from TiL's reporting platform that shows one of the aspects of the topic of 1:1 meetings between superiors and their direct reports, specifically information about who organizes these type of meetings.

When used on a regular basis and under the assumption that each alert is accompanied by a proper action, such alerting will lead in the end to a “new normal” that will reflect the targets that are specified within the alerts. The whole process is not dissimilar to the GROW model of coaching (Whitmore, 1988) that enables people to achieve their goals through systematic “confrontation” of these goals with their current reality and through systematic experimentation with possible actions that will bring them closer to their goals (see Figure 3). Alerts apply the very same logic to the groups of people working in/across teams and departments.

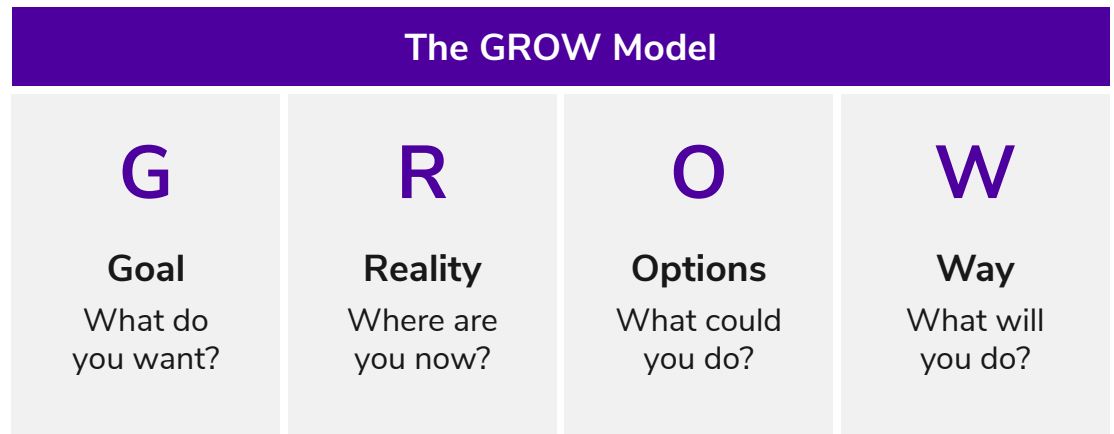


Figure 3: The GROW model represents one of the most popular coaching frameworks that enables individuals to implement such changes in their lives that bring them closer to their goals. The logic behind this model can be applied effectively also on teams and departments. That is why it is implemented also within alert views in Time is Ltd. reporting platform that try to help companies navigate closer to effective patterns of collaboration between their employees.

Conclusion

When properly processed and interpreted, passive data coming from various online collaboration tools represents easily accessible source of actionable insights into patterns of cooperation between employees. As we have demonstrated in this white paper, these insights can be invaluable in times when companies are facing challenges coming from a quick shift to remote work environments. Moreover, even as we return back to our physical workspaces, these insights will still be highly valuable when analyzing employee cooperation. Given the increasingly collaborative nature of our jobs (Ridley, 2011) and ongoing disruption of the modern workplace (McNulty, February 2020), there will always be enough opportunities for redefining and tuning patterns of cooperation that should be informed by analysis of traces we leave behind as we do our daily work. Our personal mission is to help companies utilize this type of data and democratise and push further insights inferred from it to improve both employees’ experience and companies’ bottom line.

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Get in touch

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