1. Introduction

Ever since the opening in 2012, the newly built Metaforum has become a very popular studying spot for TU/e students. Next to offering excellent facilities, the university library is also housed in Metaforum. The public facilities of the Metaforum building consist of three different floors. The main floor is floor 1, which is on walkway level, and has about 240 study spots. The university library is housed on floor 0 and -1. The bulk of the study spots, about 400, is on floor 0 and there is an additional number of concentration study spots, about 130, on floor -1.

A lot has changed over the years. The TU/e experiences growing student numbers increasing the load on the TU/e and the facilities in Metaforum. In addition, the Metaforum student facilities have become very popular under non TU/e students. Specifically, students from high schools, local MBO and HBO institutions are making use of the university library more often for various reasons.

This has not gone unnoticed amongst TU/e students. During the exam periods at the TU/e, the university library is overcrowded with students studying for their exams. An especially high degree of dissatisfaction arises when there is no spot available due to a non-TU/e visitor. To increase understanding of the current situation and how students perceive the (over)crowdedness of the Metaforum university library, Groep-één set up a survey in cooperation with the TU/e Real Estate Management Department (Dienst Huisvesting).

This report discusses our findings. We analyze the results, summarize the conclusions and state Groep-één’s position on the Metaforum situation. We conclude with a short number of proposals to alleviate the situation.

2. Survey

During the first exam weeks of the TU/e of academic year 2016/2017, which took place between November 1st and 16th 2016, students were asked to participate in a short online survey which addressed the following questions:

1. Is there a spot available for you to study/work? [Yes, No]
2. If 'No', where are you going to study/work right now? [...]
3. Which kind of spot are you looking for? [Individual studying, Individual work (Master thesis), Individual work (extra-curricular), Group work/studying]
4. From which department are you? [BME, BE, EE, ID, IE&IS, CE&C, AP, ME, M&CS]
5. If you have any other comments regarding study spots, please let us know: [...]
3. Results
The following summary has been drawn up from the results of the survey.

**Participation:** Students filled in the survey 297 times.

- Students answered 97 times that there did was a spot for them to study in the Metaforum. (33%)
- Students answered 200 times that there was no spot for them to study in the Metaforum. (67%)
Goal of the visit:

- Most students come to study individually.
- Some students mention to work on their master thesis.

Alternatives: Students filled in 201 times about where they go if no spot is available.

- Students answered 88 times that they go home if there is no spot in the Metaforum to study. (44%)
- Students answered 47 times that they move to the Flux building. (23%)
- Students answered 52 times that they go to their department building. (26%)

Table 1: Alternative locations where students go if no spot at Metaforum

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<thead>
<tr>
<th>Alternatives</th>
<th>AP</th>
<th>BE</th>
<th>BME</th>
<th>CE&amp;C</th>
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Student's comments: Students filled in an additional comment 138 times. (46% of total)

- Students complained 56 times about non-TU/e students (HBO, MBO, high school) in the Metaforum. (40%)
- Students complained 37 times about noise and nuisance. (27%)
- Some other relevant comments: more toilets, more chairs, more spots on campus to study, some spots in Metaforum lack facilities, set up study rooms within department during exam periods, no spot on 1st floor to eat since it is not allowed in the library anymore, students of other departments also use facilities on floor 3 and higher, improve design Metaforum to prevent noise pollution from floor one to the library, ...
4. Conclusions & Recommendations

During the exam weeks, TU/e students cannot always find a spot to study for the exams during the day. Spots are only available early in the day. This also causes students to reserve a seat and then leave to do other things and come back to study, increasing the problem. In addition, another problem is that food is prohibited on floor 0 and -1. Students now experience difficulties in finding a spot to eat on the first floor. In addition, some spots become very messy due to the localized food consumption. The problem of food consumption has been moved to another place but problems are not yet solved completely.

Most of the students come to study individually in the Metaforum. A couple of students mentioned working on their Master thesis in the Metaforum. Real Estate Management Department explained that working spots for master thesis students have higher requirements than study spots and that these spots should be available in the own department. It should be checked whether all departments facilitate enough working spots for master thesis students within their department.

If there is no place to study in the Metaforum, many students go home. Flux is an appreciated alternative by students. However, the departments of EE and AP have received complaints in the past of students from other departments occupying working spots of master students EE and AP. A small part of the students go to their department building if the Metaforum is unavailable. It would be good to visualize and communicate all the suitable study spots all over the TU/e Science Park so that students don’t have to go home and stay on the university to study.

Students who do have a spot to study are not content yet. Many complain about noise and nuisance in the university library because it’s very crowded. The concentration spots on floor -1 are not silent anymore. In addition, a lot of noise is coming from floor 1. The result is that the library atmosphere of studying is gone and the university library is not a good place to study anymore.

Students complain about non-TU/e visitors who are occupying study spots in the Metaforum. These students from high school, MBO and HBO institutions like to use the Metaforum because of its good facilities. It seems that the popularity of the TU/e Metaforum building has increased among these groups of people during the last years. There are complaints about the behavior of non-TU/e visitors. It is said that these students don’t always come to study and don’t obey the rules of conduct (noise e.g.) in the university library. This may be strongly correlated to the problem of crowdedness, the resulting noise and nuisance and unavailability for TU/e students. A current estimate of this problem can be made by looking at the students’ laptop, but there is no method to correctly determine the ratio of TU/e and non-TU/e visitors in the university library.

In addition, the old TNO building on the TU/e Science Park is purchased by Fontys. This will result in an increased amount of non-TU/e students on campus. Just like the new building should foresee enough parking spots and bicycle facilities, so should be done in terms of decent study facilities for the increased amount of non-TU/e students.
5. Position

The university library is set up by the TU/e as a public space for various users. This brings advantages for the university as it is a place for innovation and cooperation. However, this public character should never be detrimental to the situation of the TU/e and its students. Given that the TU/e is growing immensely, one should look critically that TU/e students will not suffer under this public character.

A solution to this capacity problem could be opening lecture rooms as study spots on the TU/e Science Park when it is needed during the busy exam period. However, TU/e students then are offered a less suitable location to study, while non-TU/e visitors enjoy the best (study) facilities in the Metaforum. The TU/e students pay a yearly fee to be a TU/e student and enjoy the TU/e facilities like the Metaforum. They thus should be guaranteed a decent place to study.

This position is supported by the University Council.

6. Proposal

Study comfort must be increased for TU/e students for the next exam period. This period consists of 1 pre-exam week and 2 exam weeks and will be from 16 January – 5 February 2017. Groep-één thinks it is unacceptable that TU/e students go home during the exam period because there is no place to study due to non-TU/e visitors.

Concretely:

1. Study facilities all over the campus can be visualized by Real Estate Management Department and must be communicated to all students so it is clear where one can study using suitable facilities next to the Metaforum.
2. Groep-één proposes to monitor the degree of study spot occupation by TU/e and non-TU/e visitors in the university library by registering all visitors on entrance. This can become very useful taking in account the growth of the TU/e. In addition, one should look for correlation between noise and nuisance and the amount and type of visitors. This is important, but unfortunately does not improve the situation for the TU/e students when it is needed in preparation for the exams, so:
3. Groep-één proposes to do a pilot in which only TU/e students can access the university library (floors 0 and -1) upon showing the TU/e campus card. This pilot should be communicated clearly to all students and also to neighboring high school, MBO and HBO institutions. One can look for possibilities to maintain the library reception service, so that non-TU/e visitors who are using library facilities can still come and go to lend books but not use spots down in the university library. The pilot should be evaluated to see whether the TU/e students can use the university library comfortably and study effectively.