ÉSIS has undertaken a comprehensive assessment of student learning outcomes for the academic years 2012-2013 through 2016-2017. The assessment draws on both direct and indirect measures of learning outcomes as identified in Table 1. The mechanisms used for the assessment include the following:

**Direct measures**

**Coursework**

Professors’ evaluations based on selected assignments and exam questions designed to assess specific learning outcomes in core and elective courses

**Employers’ evaluations**

Employers’ evaluations of CO-OP students’ performance with respect to problem solving, communication skills, professional ethics, independence, initiative, and teamwork

**iPortfolio**

Examiners’ evaluations of specific learning outcomes demonstrated in capstone iPortfolios

**Case Problem**

Examiners’ evaluations of specific learning outcomes demonstrated in capstone case problems

**Thesis**

Examiners’ evaluations of students’ understanding of subject matter, research methodology, and organization, writing style, and presentation

**Indirect measures**

**Course evaluations**

Students’ evaluations of how much they learned in courses (question 10)

**Work placement reports**

**CO-OP work term report**: Students’ assessments of their work term experience relevant to the understanding and mastery of critical concepts in the areas of the social, cultural, economic, and political information environment; research and evaluation skills; and ethics, values, and professional practice

**Experiential learning end-of-project report**: Students’ assessments of the applicability of classroom knowledge to practice in the workplace
**Student surveys**

**CO-OP survey:** Students’ assessments of the application of knowledge and skills in their work placements with respect to knowledge of the theory of information studies, knowledge of practice in the field, knowledge of research design and data analysis, problem-solving skills, oral communication skills, written communication skills, knowledge of professional ethics, and teamwork (question 5 in the 2013 survey, and question 3 in the 2016 surveys); students’ assessments of personal strengths relative to the requirements of the profession (question 3 in the 2013 survey, and question 4 in the 2016 surveys)

**Exit survey:** Students’ assessments of foundational knowledge and skills gained in the program with respect to knowledge of research design and data analysis, problem-solving skills, oral communication skills, written communication skills, knowledge of professional ethics, and teamwork (questions 9 and 12 in the surveys from 2012-2013 through 2014-2015, and questions 9 and 14 in the 2015-2016 and 2016-2017 surveys); and students’ assessments of personal strengths relative to the requirements of the profession (question 8)

**Alumni survey:** Graduates’ assessments of skills gained in the program with respect to knowledge of research design and data analysis, problem-solving skills, oral communication skills, written communication skills, knowledge of professional ethics, and teamwork (question 10); students’ assessments of personal strengths relative to the requirements of the profession (question 9)

**Employment statistics**

Percentage of graduates finding professional employment within six months of completing the program

**Results**

The results of the evaluations for which there are quantitative measures in place are reported in the following tables:

- Table 2: Course Assignments and Exams
- Table 3: CO-OP Employer Evaluations
- Table 4: Capstone Courses
- Table 5: Student Course Evaluations
- Table 6: Student Surveys

All quantitative results are reported on a five-point scale (rounded to one decimal place). The results are reported as averages for the academic year.

Evaluations of course assignments and exams reported by the professor as a letter grade have been converted using the mid-point of the letter grade expressed as a percentage. Percentages are then converted to the five-point scale (e.g., 82% = 4.1).

CO-OP evaluations reported by the employer on a ten-point scale corresponding to letter grades have been converted using the mid-point of the corresponding letter grade expressed as a percentage. Percentages are then converted to the five-point scale (e.g., 86% = 4.3).
Capstone course evaluations are reported using the panel of evaluators’ five-point scale (e.g., acceptable = 3).

Student course evaluations are reported using the average weighted score on a five-point scale calculated on student responses to the statement “I have learned a lot in this course” (e.g., a response of “strongly agree” is given a weighted value of 5).

The results of student surveys are reported using the average weighted score on a five-point scale calculated on student responses to statements such as “The MIS program provided a learning environment that enabled me to develop the following skills ...” (e.g., a response of “agree” is given a weighted value of 4 and “disagree” is given a weighted value of 2).

Employment statistics are based on the percentage of students in a graduating class reporting that they have obtained professional employment within six months of completing the program. Percentages are converted to the five-point scale (e.g., 80% = 4.0). Employment statistics for the graduating classes of 2012 through 2016 are as follows:

<table>
<thead>
<tr>
<th>Year</th>
<th>Percentage</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011-2012</td>
<td>100%</td>
<td>5.0</td>
</tr>
<tr>
<td>2012-2013</td>
<td>70%</td>
<td>3.5</td>
</tr>
<tr>
<td>2013-2014</td>
<td>73%</td>
<td>3.7</td>
</tr>
<tr>
<td>2014-2015</td>
<td>58%</td>
<td>2.9</td>
</tr>
<tr>
<td>2015-2016</td>
<td>100%</td>
<td>5.0</td>
</tr>
<tr>
<td>2016-2017</td>
<td>95%</td>
<td>4.5</td>
</tr>
</tbody>
</table>

The assessments conducted using qualitative measures will be reviewed by faculty to identify strengths and weaknesses emerging from relevant reports (e.g., the examiners’ critiques of theses submitted for defence, and the reports submitted by students completing their CO-OP work terms).
Table 1: Assessment Mechanisms Mapped to Student Learning Outcomes

<table>
<thead>
<tr>
<th>Student Learning Outcomes</th>
<th>Direct Measures</th>
<th>Indirect Measures</th>
</tr>
</thead>
<tbody>
<tr>
<td>On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knowledge Base</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Research and Evaluation Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Planning and Problem Solving</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Develop effective program and service plans, and devise solutions to problems encountered in the administration of information policies and in the management and delivery of information services.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Adapt existing and emerging information practices and technologies to meet evolving program and user needs.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Communication Skills</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Professional Values and Ethics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understand the role that personal and professional values and ethics play in the formulation of information policies, the design and delivery of information services, and the advancement of the profession.</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>Recognize the value of the contributions that are made to the field through education, research, leadership, service, and continuous professional development.</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:

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<th>Student Learning Outcomes</th>
<th>Direct Measures</th>
<th>Indirect Measures</th>
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<tbody>
<tr>
<td></td>
<td>Coursework</td>
<td>Employer evaluations</td>
</tr>
<tr>
<td>Initiative, Teamwork, and Self-Assessment</td>
<td><img src="#" alt="■" /> <img src="#" alt="■" /> <img src="#" alt="■" /> <img src="#" alt="■" /></td>
<td><img src="#" alt="■" /></td>
</tr>
<tr>
<td>Exercise initiative, and work effectively as an individual, in teams, and in partnerships.</td>
<td><img src="#" alt="■" /> <img src="#" alt="■" /> <img src="#" alt="■" /> <img src="#" alt="■" /></td>
<td><img src="#" alt="■" /></td>
</tr>
<tr>
<td>Assess their personal strengths relative to the requirements of the profession.</td>
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■ = Quantitative measure  □ = Qualitative measure
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<tbody>
<tr>
<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
<td>4.3</td>
</tr>
<tr>
<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
<td>4.1</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>4.2</td>
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<tbody>
<tr>
<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
<td>4.0</td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
<td>4.2</td>
</tr>
<tr>
<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
<td>4.0</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
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<tbody>
<tr>
<td>Develop effective program and service plans, and devise solutions to problems encountered in the administration of information policies and in the management and delivery of information services.</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>4.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Adapt existing and emerging information practices and technologies to meet evolving program and user needs.</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
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</thead>
<tbody>
<tr>
<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
<td>4.1</td>
<td>4.0</td>
<td>4.1</td>
<td>4.2</td>
<td>4.2</td>
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</thead>
<tbody>
<tr>
<td>Understand the role that personal and professional values and ethics play in the formulation of information policies, the design and delivery of information services, and the advancement of the profession.</td>
<td>4.0</td>
<td>4.2</td>
<td>4.3</td>
<td>4.2</td>
<td>4.1</td>
</tr>
<tr>
<td>Recognize the value of the contributions that are made to the field through education, research, leadership, service, and continuous professional development.</td>
<td>4.4</td>
<td>4.2</td>
<td>4.2</td>
<td>4.0</td>
<td>4.1</td>
</tr>
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</thead>
<tbody>
<tr>
<td>Exercise initiative, and work effectively as an individual, in teams, and in partnerships.</td>
<td>4.1</td>
<td>4.3</td>
<td>4.2</td>
<td>4.3</td>
<td>4.2</td>
</tr>
<tr>
<td>Assess their personal strengths relative to the requirements of the profession.</td>
<td></td>
<td></td>
<td></td>
<td>4.3</td>
<td>4.2</td>
</tr>
</tbody>
</table>
Table 3: CO-OP Employer Evaluations

Average of work-term evaluations calculated on a 5-point scale

On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:

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<th>Knowledge Base</th>
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<tbody>
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<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
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<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
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<th>Research and Evaluation Skills</th>
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<tbody>
<tr>
<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
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<tr>
<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Planning and Problem Solving</th>
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</thead>
<tbody>
<tr>
<td>Develop effective program and service plans, and devise solutions to problems encountered in the administration of information policies and in the management and delivery of information services.</td>
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<tr>
<td>Adapt existing and emerging information practices and technologies to meet evolving program and user needs.</td>
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<th>Communication Skills</th>
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<tr>
<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
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<th>Professional Values and Ethics</th>
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<tbody>
<tr>
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<tr>
<td>Recognize the value of the contributions that are made to the field through education, research, leadership, service, and continuous professional development.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Initiative, Teamwork, and Self-Assessment</th>
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</thead>
<tbody>
<tr>
<td>Exercise initiative, and work effectively as an individual, in teams, and in partnerships.</td>
</tr>
<tr>
<td>Assess their personal strengths relative to the requirements of the profession.</td>
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<tbody>
<tr>
<td>4.4</td>
<td>4.4</td>
<td>4.2</td>
<td>4.5</td>
<td>4.6</td>
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<tr>
<td>4.4</td>
<td>4.5</td>
<td>4.2</td>
<td>4.5</td>
<td>4.7</td>
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<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.5</td>
<td>4.9</td>
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<td>4.5</td>
<td>4.5</td>
<td>4.3</td>
<td>4.6</td>
<td>4.7</td>
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</table>
Table 4: Assessment of Student Learning Outcomes - Capstone Course

Average of examiners’ evaluations calculated on a 5-point scale

On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:

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<tbody>
<tr>
<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
<td>3.9</td>
<td>3.9</td>
<td>N/A</td>
<td>3.8</td>
<td>4.0</td>
</tr>
<tr>
<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
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<tbody>
<tr>
<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
<td>3.6</td>
<td>3.7</td>
<td>N/A</td>
<td>3.6</td>
<td>4.0</td>
</tr>
<tr>
<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
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<tbody>
<tr>
<td>Develop effective program and service plans, and devise solutions to problems encountered in the administration of information policies and in the management and delivery of information services.</td>
<td>3.8</td>
<td>4.0</td>
<td>N/A</td>
<td>3.2</td>
<td>4.0</td>
</tr>
<tr>
<td>Adapt existing and emerging information practices and technologies to meet evolving program and user needs.</td>
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</thead>
<tbody>
<tr>
<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
<td>4.1</td>
<td>4.0</td>
<td>N/A</td>
<td>3.7</td>
<td>4.0</td>
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<tbody>
<tr>
<td>Understand the role that personal and professional values and ethics play in the formulation of information policies, the design and delivery of information services, and the advancement of the profession.</td>
<td>3.6</td>
<td>3.9</td>
<td>N/A</td>
<td>N/A</td>
<td>4.0</td>
</tr>
<tr>
<td>Recognize the value of the contributions that are made to the field through education, research, leadership, service, and continuous professional development.</td>
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<tbody>
<tr>
<td>Exercise initiative, and work effectively as an individual, in teams, and in partnerships.</td>
<td>3.9</td>
<td>4.0</td>
<td>N/A</td>
<td>4.0</td>
<td></td>
</tr>
<tr>
<td>Assess their personal strengths relative to the requirements of the profession.</td>
<td>3.9</td>
<td>4.2</td>
<td>N/A</td>
<td>4.5</td>
<td></td>
</tr>
</tbody>
</table>
Table 5: Student Course Evaluations
Average of student evaluations of course content calculated on a 5-point scale

On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:

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<tbody>
<tr>
<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
<td>4.2</td>
<td>3.7</td>
<td>4.0</td>
<td>4.1</td>
<td>4.3</td>
</tr>
<tr>
<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
<td>4.3</td>
<td>4.1</td>
<td>4.1</td>
<td>4.4</td>
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<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
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<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
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<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
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</thead>
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<tr>
<td>Understand the role that personal and professional values and ethics play in the formulation of information policies, the design and delivery of information services, and the advancement of the profession.</td>
<td>4.4</td>
<td>4.1</td>
<td>4.1</td>
<td>4.4</td>
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<tr>
<td>Recognize the value of the contributions that are made to the field through education, research, leadership, service, and continuous professional development.</td>
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<td>Assess their personal strengths relative to the requirements of the profession.</td>
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### Table 6: Student Surveys

*Average of student responses to survey questions calculated on a 5-point scale*

On successful completion of the Master of Information Studies (MIS) program, students will have demonstrated, in both English and French, that they:

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<tr>
<td>Understand the interrelationships between information policies and services and the social, political, economic, cultural, and technological context within which they operate.</td>
<td>4.3</td>
<td>4.4</td>
<td>3.6</td>
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<tr>
<td>Understand the concepts, theories, principles, and practices that underpin information policies, programs, and services, and their management.</td>
<td>3.6</td>
<td>3.9</td>
<td>4.2</td>
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<tr>
<td>Assess the appropriateness of research methodologies to questions under investigation, and evaluate research findings and applications for their relevance to the field.</td>
<td>4.3</td>
<td>4.4</td>
<td>3.8</td>
<td>3.3</td>
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<tr>
<td>Assess and evaluate information sources, technologies, policies, practices, and services for their effectiveness in meeting a diversity of program and user needs.</td>
<td>3.6</td>
<td>3.9</td>
<td>4.2</td>
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<tr>
<td>Develop effective program and service plans, and devise solutions to problems encountered in the administration of information policies and in the management and delivery of information services.</td>
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<td>3.8</td>
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<td>Adapt existing and emerging information practices and technologies to meet evolving program and user needs.</td>
<td>4.3</td>
<td>4.5</td>
<td>3.9</td>
<td>4.2</td>
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<td>Communicate clearly and effectively in a professional environment using media, modes, and models appropriate to the content, audience, and objectives of the communications message.</td>
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<td>Understand the role that personal and professional values and ethics play in the formulation of information policies, the design and delivery of information services, and the advancement of the profession.</td>
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<td>4.2</td>
<td>3.7</td>
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