



Inmegh-CMS

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Digamber Singh

Exalogic Solutions Pvt. Ltd

#21, 2nd floor, First Futuristic Group,
1st Main Road, behind CBI office
Ganga Nagar Layout
Bangalore 560032

Overview

Inmegh-CMS is a college based web application, the application has five logins - Super-admin, Branch-admin, Employee, Student and HOD logins. The whole application is divided into many modules and each module has various features like- Attendance, Timetable (Auto - Manual), Teacher substitution, Setup, Registration, Transportation, Online Fees Portal etc.

Goals

1. To provide bug free software for the various colleges and Institutions for educational purposes.
2. To ensure the quality and software meets its requirements in all aspects.

Specifications

Inmegh-CMS is divided into various logins and each login is having specific modules and access authorization based on which distinguish functionalities has been provided as :

Active Logins

1. Admin.
2. HOD.
3. Employee.
4. Student.
5. Librarian.
6. Placement Coordinator.
7. Chairman.
8. Warden.
9. Principle.
10. Parent.

Super-Admin Login (Full Authorization)

1. Dashboard.
2. Quote Of The Day.
3. Setup.
4. Admissions.

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5. Human Resource.
 6. Grievances.
 7. Management.
 8. Online Users.
 9. SMS & Email Groups.
 10. SMS Details.

HOD Login (Branch Authorization)

1. Dashboard.
2. Quote Of The Day.
3. Setup.
4. Admissions.
5. Human Resource.
6. Grievances.
7. Management.
8. Gate Pass.
9. Permission.
10. Online Users.
11. SMS & Email Groups.
12. SMS Details.
13. Resignation.

Employee Login (Partial Authorization)

1. Dashboard.
2. Academic.
3. Extracurriculars.
4. Grievances.
5. Hospital.
6. Leave Application.
7. Gate Pass.
8. Permission.
9. Placement Trainings.
10. Library.
11. SMS.
12. Resignation.

Student Login (Low Authorization)

1. Dashboard.
2. Academic.
3. Extracurriculars.
4. Fees.
5. General Information.
6. Grievances.
7. Hospital.
8. Leave Application.
9. Gate Pass.
10. Library.
11. Placements.
12. Placement Trainings.
13. Scholarship.

Librarian Login (Modular Authorization)

1. Dashboard.
2. General Info.
3. Library.
4. Defaulters List.
5. Events.
6. Complaints.
7. Resignation.

Placement-Coordinator (Modular Authorization)

1. Dashboard.
2. Quote Of The Day.
3. Students.
4. Placement.
5. Training.

Chairman (Modular Authorization)

1. Dashboard.

2. Academic Info.
3. Course Details.
4. Data.
5. Fees.
6. Grievances.
7. Management.
8. Online Users.

Warden Login (Modular Authorization)

1. Dashboard.
2. Hostel.
3. Grievances.

Module-Wise Specifications

Super-Admin Login

Super-Admin is having full access authorization for all the modules as each module is having distinguish functionality as described below :

Dashboard

Dashboard is the home page of college application. Which consists showable daily frequently changing information like :

1. **Institution Drop-down** - User can select different institutions for viewing/editing of information.
2. **Email Icon Button** - Used for sending/receiving emails within the application portal.
3. **Todo Icon Button** :
 - Used to create Todo list for user's own use.
 - User can create, delete, view and change status of the todo task assigned.
 - The todo task is assigned based on priorities (i.e; high, low, med).
 - A popup will be shown as soon as todo task reaches its reminder date and reminder time.
4. **Admin Profile Button** :

- User can change his/her current password.
- User can edit and upload his profile picture.
- User can view, edit, create and create “Day Order” for every particular Institution.

5. **Complaints Count.**
6. **Deactivated Users Count.**
7. **Upcoming Drive Count.**
8. **Disciplinary Actions Count.**
9. **Notice Board – For creating notice which will be displayed on dashboard.**
10. **Fee Transactions For Academic Year.**
11. **Student Previous Month Attendance Report.**
12. **Toppers List.**
13. **Upcoming Events.**
14. **Employee Previous Month Attendance Report.**
15. **Department-Wise Students.**
16. **Monthly Holidays.**
17. **Currently Logged-In Users.**
18. **News.**

Quote Of The Day

1. In this module user can create his/her own quotes manually.
2. The quotes shown on the dashboard are random.
3. User can Edit/Delete Quotes.

Setup

Setup is the most important and basic building block for defining user interface between the system and the application. Setup defines how application is to be structured based on specific college requirements. Setup consists of three major functional modules :

1. **College - To set-up college/university basic informations.**
2. **Academic - To set-up college/university academic informations.**
3. **Extracurricular - To set-up college/university extracurricular informations.**

College

College module is the first basic college setup module. It consists of 12 modules like:

1. Institutions :

- User can create various Institutions/Branch depending upon their requirements.
- User can View, Edit and Create “Day Order” for every particular Institution.
- User can select Day Order and the corresponding date.
- If Day Order is selected for any particular date then in faculty and student logins the selected Day Order timetable will be displayed on dashboard.

2. Class Room - For setting-up classrooms. This sub-module consists of two more sub-modules :

(a) Create - To create rooms.

(b) View - To view the already created rooms.

3. Complaint Parameter :

- To create complaint parameters like: Indiscipline etc.
- Visible to Employee, HOD, Student, Branch-Admin (i.e; can create), Librarian and Chairman(i.e; can view only).

4. Academic Calendar :

- Date-wise list of already created Day-orders will appear.
- User can Edit or Delete particular day “Day-order”.
- With “Academic Calendar Template” user can import “Day-orders” based on their Branches individually or by selecting all Branches also.
- For uploading “Day-orders” first user has to download the day-order template and select the particular day-orders corresponding to each date.
- For Importing day-order template: “Import File Template” button is given.

5. Program Details :

- User can create details about the college courses/programs like: MCA (years, duration, semesters) etc.
- User can check for program seats availability.

6. Feedback Parameter :

- Admin and Hod can create feedback parameters based on Type as Student and Employee.
- Employee, HOD and Student can give feedbacks to each other under grievances module.
- Chairman can only view feedbacks given by students and employees.

7. Qualifications :

- Admin and Hod can create Qualifications.
- These created qualifications parameters will be available in student edit page.

8. Add Violation Type :

- User can create/edit Violation Type.
- These violation type are used in disciplinary action module while creating disciplinary action.

9. Form Validations - To select/make specific fields for the mandatory options based on models eg. Student Registration Page. This sub-module consists of two more sub-modules :

(a) Add Validation - From drop-down user can select validation model and enable the fields for validations.

(b) View - User can Edit i.e; enable/disable the validations.

10. Employee Working Days - To calculate employees attendance.

11. Holiday :

- User can create/edit holiday.
- Holiday can be single/multi-day.

- Once the day was marked holiday attendance cannot be marked for that day.

12. Modules :

- User can activate/deactivate certain set for predefined modules.
- Once the module is activated it is visible in sidebar under its specific utilization.

Academic

In Academic module we will setup the information regarding college academic details like: subjects, semesters etc. It consists of 12 important modules like :

1. Branch - User can create/edit various branches based on their institutions. Eg : B.Tech under SRM-Vadapalani institution.

2. Batch - For setting-up branch batches like : MCA (2017-2020). This sub-module consists of two more sub-modules :

(a) **Create** - To create batch.

(b) **View** - To view the already created batches.

3. Groups :

- For setting-up groups according to batches and their corresponding sections. Eg : MCA (2017-2020) , Sec-A, Capacity -60 can be divided into Group-1(20), Group-2(20), Group-3(20).
- These created groups are selectable while creating timetable for practical subjects.
- This sub-module consists of three more sub-modules :

(a) **Create** - To create group.

(b) **View** - To view/edit the already created groups.

(c) **Assign** - To assign groups for selected students.

4. Semester :

- For setting-up semester according to batches and their time duration. Eg : MCA (2017-2020) , Sem-1, duration -6 months, start-date, end-date.
- User can also enable first/end semester for the semester that is being created.
- This sub-module consists of 3 more sub-modules :

(a) **Create** - To create semester.

(b) **View** - To view/edit the already created semesters.

(c) **Set Current Semester** - To assign current semester for particular batch.

5. Subjects :

- For setting-up subjects according to branches, batches and semesters. Eg : MCA (2017-2020) , Sem-1, Subject Name.
- User can also give internal and external marks split-up, subject credits and practical enable/disable option.
- This sub-module consists of 3 more sub-modules :

(a) **Create** - To create subject.

(b) **Load Prev Subjects** - To load one batch previous subjects to another batch subjects for the same course branch.

(c) **View** - To view/edit already created subjects.

6. Elective Group & Subjects :

- For setting-up elective groups which contains various elective subjects and assigning these group subjects to particular list of students.
- Only one subject per elective group can be assigned to the student.
- This sub-module consists of 3 more sub-modules :

(a) **Elective Groups** - User can create and view elective groups depending upon branch, batch, semester, elective group name. Consists of two sub-modules :

(1) **Group** - To create elective groups.

(2) View - To view/edit/delete elective groups.

(b) Elective Subjects - User can create and view elective subjects depending upon branch, batch, semester, elective group name. Consists of three sub-modules :

(1) Subject - To create elective subjects.

(2) View - To view/edit/delete elective subjects.

(3) Load Prev Electives - To load one batch previous elective subjects to another batch elective subjects for the same course branch.

(c) Assign Electives - To assign elective subjects depending upon branch, batch, section and elective group to the selected students. Consists of two sub-modules :

(1) Assign Subject - To assign elective subjects.

(2) View - To view/edit/delete assigned elective subjects.

7. Faculty Subjects :

- **For assigning branch- wise and batch-wise subjects to faculties.**
- **User can also assign faculties to other departments/branches.**
- **This sub-module consists of 4 more sub-modules :**

(a) [+]Assign Employees Subject – Assigning branch/department-wise faculties to the particular subjects.

(b) [+]Assign Employee Subjects – Assigning faculties to other branches/departments for particular subjects.

(c) View – To view/edit/delete all the subject assigned to a particular faculty.

(d) Employee Subjects – To view/delete subject-wise faculty assigned.

8. Timetables :

- User can create timetable according to their department/branch, batch, section and semester.
- User can also select working days for the particular timetable.
- User have to give "From-Date" & "To-date" , so that timetable will be activated for a particular period of time and once those dates duration is over then the timetable will be deactivated automatically.
- This sub-module consists of 4 more sub-modules :

(a) **Timetable** – For creating new timetable.

(b) **Active Timetables** – All the activated timetable list will be shown.

(c) **Expired Timetables** – All the expired timetable list will be shown.

(d) **Timetable Report** – Timetable "day-wise hour" report will be displayed.

9. Question Papers :

- User can create and manage both "online and offline" question papers .
- User can upload question papers and set parameters like: CO and PO.
- User can also give marks per question.
- User can create online assesment exams.
- This sub-module consists of 3 more sub-modules :

(a) **Offline Q-Paper** – For creating new offline question paper.

Consists of 4 sub-modules :

(1) **[+]Exam Q-Paper** - To create new offline question papers.

(2) **Set Exam Q-Paper** – User can set exam question paper for internal and sem exam.

(3) **Prev Q-Paper** - To upload one batch previous semester question papers for the exam.

(4) View Prev Q-Paper - To view/edit/delete previous semester question papers.

(b) Online Q-Paper – For creating new online question papers.

Consists of 2 sub-modules :

(1) [+]Set Question Paper - To create new online question papers with MCQ and upload question paper options.

(2) View - To view/edit/download already created online question papers.

(c) Online Assessments – For creating new online assessments exams.

Consists of 3 sub-modules :

(1) Assign Assessment - To create new online assessment exam for which online questions should be created first. Once created, a online assessment link will be enabled in student login for giving the assessment exam.

(2) View - To view/edit the online assessment exam status.

(3) [x]Report - To view/download excel reports for a particular time duration.

10. Exams :

- User can create “Exam” based on their branch, batch, semester and Exam type.
- All the created exams(i.e; internal/external) will be available in “View”.
- “Add Marks” button will take user to the marks entering/uploading interface.
- For entering student marks first exam timetable needs to be create.
- If student overall attendance percentage is less than 75% then those students list will appear in “Not Eligible Student's List” from there Admin and HOD can permit the student. Once student is permitted that student will appear in “Allowed Students After Permission” list.

- **User has to mark student exam attendance for entering the exam marks subject-wise.**
- **This sub-module consists of 9 more sub-modules :**

(a) [+]Exams – For creating exam i.e; University exam and Internal exams.

(b) View Exams – To view created exams and its details.

(c) Reports – To generate exam report subject-percentage wise.

(d) Subject Analysis – Subject-wise analysis report.

(e) Exam Analysis – Exam-wise analysis report.

(f) Arrear Histories – Students arrear histories.

(g) Timetable – Creating Exam Timetable.

(h) View Timetable – View Exam Timetable.

(i) Reports – For creating new offline question paper.

Consists of 3 sub-modules :

(1) Monthly Report – Monthly exam PDF/Graph report.

(2) Subject Wise Report – Subject-wise PDF/Graph report..

(3) Result Analysis Report – Exam result summary PDF report.

11. Seminars :

- **User can create/view “Seminars” based on branch, batch, semester, section and subject.**
- **User can assign/view seminars to particular batch students.**
- **Assigned student for the seminar can view the seminar details.**
- **This sub-module consists of 4 more sub-modules :**

(a) [+]Seminar – For creating seminar i.e; TechnoWar.

(b) View – To view created seminars and its details.

(c) Assign Seminars – To assign seminars to particular batch students.

(d) Seminar Dates – To view assigned seminars to particular batch students date-wise.

12. Attendance :

- **User can view various graphical and excel reports like: monthly, subject-wise, percentage and historical.**
- **Assigned student for the seminar can view the seminar details.**
- **This sub-module consists of 2 more sub-modules :**

(a) Student Attendance – To view student attendance and reports. Consists of 6 sub-modules:

(1) Monthly Report - To view monthly attendance report.

(2) Historical Report - To view historical attendance reports.

(3) Percentage Report - To view percentage attendance reports.

(4) Day Graph View - To view day graph attendance report.

(5) Subject Hours Wise Graph - To view subject hour wise attendance reports.

(6) Subject Wise Percentage - To view subject wise percentage attendance reports.

(b) Employee Attendance – To view employees attendance and reports. Consists of 4 sub-modules:

(1) Monthly Report - To view monthly attendance report.

(2) Historical Report - To view historical attendance reports.

(3) Percentage Report - To view percentage attendance reports.

(4) Graph View - To view graph attendance report.

Extracurricular

In Extracurricular module we will setup the information regarding college extracurricular activities like: activities, committee and events. It consists of 3 important modules like :

1. Activities :

- User can create college activities like: seminars, guest lecture, workshop etc.
- Once activity is created, students can register themselves by clicking on “Register” link given in student login.
- User can also register students from other colleges/institutions.
- This sub-module consists of 2 more sub-modules :

(a) **[+]Activity** - To create activities.

(b) **View** - To view/edit the already created activities.

2. Committee :

- User can create college committee's like: Disciplinary committee etc.
- These committee's consists both students and employees by clicking on assigning button.
- This sub-module consists of 2 more sub-modules :

(a) **[+]Committee/Assign** - To create/assign committee's to students and employees.

(b) **View** - To view already created committee's.

3. Events :

- User can create Events which can be single/multiday. Eg : Sports Events, cheif guest – Sachin Tendulkar.
- These events can be assigned to seminars/events hall.
- User can upload events pictures.
- Events updates will be shown in dashboard under “Upcoming Events” tile.
- This sub-module consists of 3 more sub-modules :

(a) **[+]Events** - To create events.

(b) **Edit/View** - To view/edit the already created events.

(c) **Gallery** - To view events pictures.

Admissions

In Admissions module we will register students and display their records. It consists of 3 important modules like :

1. Student :

- User can register students based on their branch, batch and section.
- Student can opt for hostel from the same registration page.
- This is one page registration for reducing the complexity. After this registration for more details user can go to edit option for the registered students.

2. Import Student :

- User can register 'n' number of students in one-shot by uploading the student registration template.
- For uploading the student registration template first user needs to download the "File Template" based on students branch and batch.

3. Student/Parent Records :

- User can view/edit/deactivate students.
- Active list contains active list of students which are currently studying.
- User can deactivate students from active students list by clicking on delete button.
- Inactive list of students contains deactivated students from active list.
- Once student is deactivated his/her login-id will be deactivated and he/she will never be able to login unless it is reactivated again.
- If any student is deactivated automatically that individual parent gets deactivated.

- **This sub-module consists of 3 more sub-modules :**

(a) Active List – Contains list of all currently active students. Consists of 2 more sub-modules :

(1) Students - To view students active list.

(2) Parents - To view parents active list.

(b) Inactive List – Contains list of all currently inactive students. Consists of 2 more sub-modules :

(1) Students - To view students inactive list.

(2) Parents - To view parents inactive list.

(c) First Graduates – Contains list of first graduate student from students family.

Human Resource

In Human Resource module we will register employees and display their records. It consists of 4 important modules like :

1. Faculty :

- User can register employees based on their faculty roles.
- Based on faculty role, distinguish login with the specific functionalities authorization have been given to the faculty.
- Employee can opt for hostel from the same registration page.
- This is one page registration for reducing the complexity. After this registration for more details user can go to edit option for the registered employees.
- User can register 'n' number of employees in one-shot by uploading the employees registration template.
- For uploading the employees registration template first user needs to download the “File Template”.
- User can view/edit/deactivate employees.
- Active list contains active list of employees which are currently studying.

- User can deactivate employees from active employees list by clicking on delete button.
- Inactive list of employees contains deactivated employees from active list.
- Once employee is deactivated his/her login-id will be deactivated and he/she will never be able to login unless it is reactivated again.
- This sub-module consists of 3 more sub-modules :

(a) **[+]Faculty** – For employee registration.

(b) **Import Faculty** – To register bulk employees in one-shot by uploading excel sheet.

(c) **Faculties** – Contains list of currently active and inactive employees list. Consists of 2 more sub-modules :

(1) **Active** - To view employees active list.

(2) **Inactive** - To view employees inactive list.

2. Recruitment :

- User can view/receive, shortlist, select and ignore the job applications sent by users.
- Job application link will be given in official website of the institution whenever there is an opening for a job.
- Applicant will get emails when their application is getting processed each time.
- This sub-module consists of 1 more sub-module :

(a) **Job Applications** – All job recruitment related functionalities.

3. Permissions :

- User can approve and reject permission requests sent by students whose attendance percentage is below 75%. So that they will be allowed to give internal/external university exams.

4. Resignations :

- User can approve, reject and view resignation requests from the employees.

- Employee can resend resignation request only when the request is rejected by the Admin.
- Once resignation approved then the employee-id will be deactivated within the time frame given by the admin.

Grievances

In Grievances module we will view complain, disciplinary action, feedback and ratings. It consists of 4 important modules like :

1. Complaints :

- User can view/reply to the complaints raised by employees and students.

2. Disciplinary Action :

- User can create/view disciplinary action for particular students.

3. Discussion Forum :

- User can edit/view discussion forum questions raised by employees and students.

4. Feedback :

- User can view feedbacks given by employees to students and from students to employees based on feedback parameters created in "Setup -> Feedback Parameter" module.
- This sub-module consists of 2 more sub-module :

(a) **From Employee** – Contains list of feedbacks given by employees to students.

(b) From Employee – Contains list of feedbacks given by students to employees.

5. Ratings :

- **User can create ratings based on survey-type.**
- **These survey-type will have survey questions.**
- **User can create open as well as selectable questions.**
- **A user can enable/disable the survey.**
- **If survey is disabled user will not be able to give ratings.**
- **Once due-date for the survey is over then survey will get expired automatically.**
- **User can view ratings score in-terms of stars and in a scale of 100 and 5.**
- **This sub-module consists of 3 more sub-module :**

(a) [+]Rating Parameters – To create rating parameters.

(b) Enable/Disable Survey – To enable/disable survey.

(c) Score – To view the outcome score of ratings produced by the survey.

Management

In Management module we will view complain, disciplinary action, feedback and ratings. It consists of 4 important modules like :

1. Faculty Participations :

- **User can view event participations, working hours, performance and paper publications by the employees.**
- **This sub-module consists of 4 more sub-modules :**

(a) Event Participations – To view event participations by employees.

(b) Working Hours – To view employees working hours.

(c) Performance – To view employees performance.

(d) Paper Publications – To view paper publications done by employees.

2. Hospital :

- User can view students blood donors list.
- This sub-module consists of 1 more sub-module :

(a) **Blood Donors** – To view students blood donors list.

3. Hostel :

- User can create/view hostel, room and floor.
- User can assign hostel, room, bed and floor to a particular students/employees.
- User can mark/edit attendance for hostel students/employees.
- This sub-module consists of 3 more sub-modules :

(a) **Setup** – To setup and view hostel, floor, rooms frequency for marking the attendance. Consists of 5 more sub-modules :

(1) **Add Hostel** – To create hostel.

(2) **Add Floor** - To create hostel floors.

(3) **Add Frequency** - To create attendance frequency.

(4) **Add Rooms** - To create hostel rooms for each floor.

(5) **View Rooms** - To view already created rooms.

(b) **Registrations** – Assign/view rooms to the students and accommodations reports. Consists of 3 more sub-modules :

(1) **Register** – To assign hostel rooms for students and employees.

(2) **Accommodations** – To view rooms allocated to the students and employees.

(3) **Accommodation Report** - To view hostel room allocation report for students and employees.

(c) **Attendance** – To mark/edit hostel students/employees attendance and view attendance reports. Consists of 6 more sub-modules :

(1) Mark Attendance – To mark hostel attendance.

(2) Edit Attendance - To edit hostel attendance.

(3) Student Attendance Report(Graph) - To view student attendance graph report.

(4) Student Attendance Report(Excel) - To view student attendance excel report.

(5) Employee Attendance Report(Graph) - To view employee attendance graph report.

(6) Employee Attendance Report(Excel) - To view employee attendance excel report.

4. Leave :

- User can create and assign leave types eg; casual leave, sick leave etc to employees.
- User can approve/reject leave requests send by employees/students.
- This sub-module consists of 5 more sub-module :

(a) [+]Leave Type – To create leave types for employees.

(b) Assign Leaves – To assign leave types for particular employees.

(c) Leave Details – To view leave count details for each employee.

(d) Employee Leave Applications – To approve/reject leave requests by employees.

(e) Student Leave Applications – To approve/reject leave requests by students.

5. Placements :

- User can create upcoming placements drives based on department.
- These survey-type will have survey questions.
- User can create open as well as selectable questions.
- A user can enable/disable the survey.
- If survey is disabled user will not be able to give ratings.
- Once due-date for the survey is over then survey will get expired automatically.

- User can view ratings score in-terms of stars and in a scale of 100 and 5.
- This sub-module consists of 3 more sub-module :

(a) **[+]Rating Parameters** – To create rating parameters.

(b) **Enable/Disable Survey** – To enable/disable survey.

(c) **Score** – To view the outcome score of ratings produced by the survey.

6. Placement Trainings :

- User can create ratings based on survey-type.
- These survey-type will have survey questions.
- User can create open as well as selectable questions.
- A user can enable/disable the survey.
- If survey is disabled user will not be able to give ratings.
- Once due-date for the survey is over then survey will get expired automatically.
- User can view ratings score in-terms of stars and in a scale of 100 and 5.
- This sub-module consists of 3 more sub-module :

(a) **[+]Rating Parameters** – To create rating parameters.

(b) **Enable/Disable Survey** – To enable/disable survey.

(c) **Score** – To view the outcome score of ratings produced by the survey.

7. Scholarship :

- User can create ratings based on survey-type.
- These survey-type will have survey questions.
- User can create open as well as selectable questions.
- A user can enable/disable the survey.
- If survey is disabled user will not be able to give ratings.
- Once due-date for the survey is over then survey will get expired automatically.

- User can view ratings score in-terms of stars and in a scale of 100 and 5.
- This sub-module consists of 3 more sub-module :

(a) **[+]Rating Parameters** – To create rating parameters.

(b) **Enable/Disable Survey** – To enable/disable survey.

(c) **Score** – To view the outcome score of ratings produced by the survey.

8. Tutor :

- User can create ratings based on survey-type.
- These survey-type will have survey questions.
- User can create open as well as selectable questions.
- A user can enable/disable the survey.
- If survey is disabled user will not be able to give ratings.
- Once due-date for the survey is over then survey will get expired automatically.
- User can view ratings score in-terms of stars and in a scale of 100 and 5.
- This sub-module consists of 3 more sub-module :

(a) **[+]Rating Parameters** – To create rating parameters.

(b) **Enable/Disable Survey** – To enable/disable survey.

(c) **Score** – To view the outcome score of ratings produced by the survey.