Smart Data capture and Automated Reporting system (SDCAR)

SSVP – Pune Central Council

Technical Document

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# Overview of the system with actors and devices

The system will allow quicker and easier entry of financial, non-financial data related to conferences, area councils and central council of the Pune region. Office bearers and selected members will be allowed to enter data, generate, view and edit the reports at each level.

A close up of electronics

Description automatically generated

Please note this system is about capturing the data inputs related financial transaction and other non-financial data. This system does not include any accounting related functions or features.

It can provide an output which can be imported to accounting systems for the required data.

# Technical specifications

## Reports

The reports will be excel and / or pdf format

## Web domain

This is to be finalized by the SSVP PCC members

Suggested [www.ssvp-pune.org](http://www.ssvp-pune.org/)

## Web hosting

For Web hosting, we will need a domain to be purchased and registered.

## Hosting server

A Linux machine, with minimum hardware configuration is required.

The hosting server will be based on Apache Tomcat web server.

## Service provider

The service provider is to be finalized, based a comparative study of features and cost of each service providers who are under consideration.

# SSVP Organisation structure

The organization hierarchy and the structure will help in creating the entities and their relationships.

Legend :-

*CC – Central council*

*Area C – Area council*

*Conf - Conference*

## Composition of each organizational entity

The composition of each organization entity is shown in the diagrams below. The office bearers of each entity will be interacting with the system. Data captured by the system, needs to be associated with the organizational level entity. Based on the hierarchy the data of the levels below will be accessible to the level.

Pune central council and the team composition

Area council and the team composition

Conference and the team composition

# High Level Functional Requirements

The two main requirements of the system are Data capture and Reporting.

## Financial data

1. All financial transactions to be captured.
2. Data of financial receipts, made through cash, cheque, electronic transactions like NEFT/RTGS
3. Payouts made through cash, cheque, NEFT/RTGS
4. Expenses made through cash, cheque, NEFT/RTGS
5. Standard validation on the currency amount, cheque details, etc. to be done, before the data is accepted into the system
6. In case an invalid data is encountered the system should highlight the field and prompt the user to enter the correct data
7. The financial data will be associated to entity, which enters the data.
8. Based on the entity hierarchy the financial data will be linked to the related entities

## Non-Financial

Non-financial data consist of two parts: -

1. The details of the conference, composition, etc.,
2. The activities done by the members of the conference, councils, etc.

## Error reporting and Alerts

System should generate visual alerts and warning to inform the user for the following: -

1. Invalid data for a given field
2. Incomplete forms
3. Duplicate entries
4. Validation related alerts for standard fields like date, numerical and non-numerical fields, etc.

## Report generation

Once the data is captured, various reports need to be generated at various entity levels.

1. Conference
   1. Monthly report
   2. Annual report
   3. Proforma I and II (annual)
2. Area council
   1. Monthly report
   2. Annual report
   3. Reports as required for Central council
3. Central council
   1. Monthly report
   2. Annual report
   3. Reports as required for National council
4. Accounting files to imported at Central council level
   1. Import files for Tally system at conference level
   2. Import files for Tally system at Area council level
   3. Import files for Tally system at Central council level

Sample reports / templates will be provided, to understand the report format, and the content required.

## Tally account files

1. Data required for the Tally accounting system should be generated by the system for all the receipts and payments.
2. Tally system at the Pune central council should be able to import the files as required, at Conference, Area council and Central council level.

## Users

Types of the system users

* 1. Super admin
  2. Admin
  3. Users at difference hierarchical levels
     1. Conferences
     2. Area councils
     3. Central councils

# Master Data

All master data will be provided in a excel workbook with different sheets for different data item

Master data for the following to be provided: -

1. List of all conferences under Pune Central council
2. List of all Area councils under Pune Central council
3. List of conferences under each Area council
4. List of Designation / Office bearer posts for
   1. Conference
   2. Area council
   3. Central council
5. List of account codes / heads for
   1. Payments
   2. Receipts
6. Duration of tenure for office bearers
7. Types of the system users
   1. Super admin
   2. Admin
   3. Users at difference hierarchical levels
      1. Conferences
      2. Area councils
      3. Central councils

# Reference Data

Data which will be modified by the administrator and referenced by the system will also be provided by manual entry. These data will be modified at periodic intervals by the administrator.

Data such as: -

1. Name of the officer bearers of each conference, area council and central council
2. Mobile number of the officer bearers of each conference, area council and central council
3. Email address of the officer bearers of each conference, area council and central council
4. Date of appointment and tenure of the office bearers of each conference, area council and central council
5. List of members of each conference with details of name, gender, age, etc.
6. Receipt and Vouchers numbers printed
7. Receipt and Vouchers numbers issued to each conference

# Features and Functionality required

## Login

1. Only those members can login, who have been added by the administrator.
2. Login will require email address and / or mobile number of the member who needs access to the system
3. Email address and / or mobile number will be the login id and will be the unique identifier for the member in the system
4. The first login password will be generated by the system and sent to the member’s mobile number
5. The member can change the password after the first login
6. Mechanism to regenerate password in case the member forgets the password, using OTP through SMS or Email
7. After login is successful the member is taken to the landing page based on their access level.
   1. For a conference office bearer or member, the landing page will be the conference landing page
   2. For an area council office bearer or member, the landing page will be the area council landing page
   3. For the central council the landing page, it will be central council landing page
8. List of users for the system
   1. Office bearers of the conferences, area councils and central council
   2. Admins
9. The landing page will be very similar for all users, they will difference in the reports that the generated, based on the hierarchy level

## Logout

1. When the user logouts, the system should prompt, in case there is data which has been entered but not saved.
2. Close all records and bring the user the login page

## Administrator panel

Implementation of frontend and backend logic for capture of all Master data and Reference data required for the functioning of the conference level features.

1. The system will have one super admin, whose login details will be shared by the developer.
2. The Super admin will login into the system through the same login page
3. The Super admin create other users as admins
4. Super admin and Admins will be taken to admin panel landing page on successful login.
5. CRUD operations for the master data should be implemented.
6. The list of master and reference data as outlined in section 5 and 6 needs to be captured
7. The CRUD operations on the master and reference data should be allowed from admin login only

## Conferences

Implementation of frontend for data collection and backend logic for report generation at the conference level. The user will be directed to the conference landing page

### Conference landing page

After successful login, the conference level user, will redirected to their landing page. The conference landing page will display call outs for all the operations for a conference member. There will be call outs for: -

1. Data entry
   1. Receipts
   2. Payments
   3. Conference details (Not to be considered)
   4. MoMs (Not to be considered)
2. Report generation
   1. Monthly reports
   2. Annual reports
   3. Conference details report (Not to be considered)

### Data entry fields for RECEIPTS

Details of the receipts (including interest received from the bank on SB ac and term deposits) to be captured. CRUD operations for each receipt data should be implemented.

1. Receipt number (mandatory, unique number, should be within the receipt numbers issued to the conference, cannot be duplicated)
2. Date of the receipt (mandatory, date picker, no future dates, back dates cannot be outside of the start of the FY)
3. Mode of receipt (mandatory, cash, cheque, NEFT/RTGS/IMPS – combo box)
4. Cheque / Transaction reference number in case of cheque or NEFT (Mandatory, if the mode is cheque / NEFT/RTGS/IMPS, Text box)
5. Date of cheque or transaction (Mandatory, if the mode is cheque / NEFT/RTGS/IMPS, date picker, no future dates, back dates cannot be outside of the start of the FY)
6. Amount (Currency, mandatory)
7. Name of the donor (mandatory)
8. Email address of the donor (optional). This will be used send the receipt by email to the donor. In case the donor does not have an email. The email will be sent to the treasurer of the unit, who can take a print out and provide it to the donor.
9. Description (optional)
10. Account head under which the receipt is made (mandatory, combo box with values from the master data)
11. Name of the member who received the donation on behalf of conference (optional, combo box with list of the members of the conference)

### Data entry for PAYMENTS

Entry of details of payment and expense vouchers to be captured. CRUD operations for each payment data should be implemented.

1. Voucher number (mandatory, unique number, should be within the voucher numbers issued to the conference, cannot be duplicated)
2. Date of the payment (mandatory, date picker, no future dates, back dates cannot be outside of the start of the FY)
3. Mode of payment (mandatory, cash, cheque, NEFT/RTGS/IMPS – combo box)
4. Cheque / Transaction reference number in case of cheque or NEFT (Mandatory, if the mode is cheque / NEFT/RTGS/IMPS, Text box)
5. Date of cheque or transaction (Mandatory, if the mode is cheque / NEFT/RTGS/IMPS, date picker, no future dates, back dates cannot be outside of the start of the FY)
6. Amount (Currency, mandatory)
7. Name of the beneficiary (mandatory)
8. Description (optional)
9. Account head under which the receipt is made (mandatory, combo box with values from the master data)

### Data Entry – CONFERENCE DETAILS (Not to be considered)

Details of the conference to be captured. CRUD operations should be implemented.

1. Name of the conference (Mandatory)
2. Date of establishment (Mandatory)
3. Date of institution (Mandatory)
4. Institution number (given by parish)
5. Name of the Spiritual advisor and mobile number (Mandatory)
6. Name of the office bearers with address, mobile number and email id (Mandatory)
   1. President
   2. Date of appointment of President
   3. Date of birth, of President (age cannot be more than 64 years)
   4. Date of end of tenure (auto calculated, after 3 years)
   5. Sr. Vice president
   6. Vice presidents/s
   7. Secretary
   8. Jt. Secretary
   9. Treasurer
   10. Jt. Treasurer
   11. Youth representative
   12. Lady representative
7. Name, age, mobile numbers of conference members (Mandatory)
8. Frequency of conference meeting (Mandatory)
9. Days of meeting (Mandatory)
10. Whether the conference is twinned (Y/N), and date of twinning, if yes
11. Whether the conference is aggregated (Y/N), date of aggregation and certificate of aggregation, if yes
12. Whether the conference got twinned newly during the year, if yes, the date of twinning
13. Whether the conference surrendered the twinning during the year, if yes the date of surrender
14. Whether Conference received Internal twinning from within the Central Council (CC)
15. Whether Conference is receiving internal twinning from Conferences from other CCs
16. Whether Conference is giving internal twinning within the CC
17. Whether Conference received Internal twinning from within the CC
18. No. of Christian Families Adopted at the start of the year
19. No. of Members in the Christian Adopted Families at the start of the year
20. No. of Christian Individuals Adopted at the start of the year
21. No. of Non Christian Families Adopted at the start of the year
22. No. of Members in the Non Christian Adopted Families at the start of the year
23. No. of Non Christian Individuals Adopted at the start of the year

### Data Entry – Minutes of Meeting (Not to be considered)

The minutes of the conference level meetings and other data required should be captured. CRUD operations for MOM data should be implemented.

1. Date and time of the meeting
2. Members who attended the meeting
3. Members who indicated their absence
4. Discussions points (multiple points, options to add points)
5. No. of visits to the Adopted Families
6. No. of individuals given casual assistance
7. No. of families given casual assistance
8. No. of visits to the sick, aged in their home, hospitals etc.
9. No of persons who were given educational help
10. No. of persons for whom employment was secured
11. No. of persons brought back to the sacramental life
12. No. of spiritual formation camps conducted
13. No. of domestic differences settled
14. No. of Christian Families Adopted
15. No. of Members in the Christian Adopted Families
16. No. of Christian Individuals Adopted
17. No. of Non Christian Families Adopted
18. No. of Members in the Non Christian Adopted Families
19. No. of Non Christian Individuals Adopted

### Report generation

Implementation of frontend for user input and backend logic for report generation at the conference level

1. Monthly reports – Financial and Non-financial data
   1. User to choose the month of the current financial year
2. Annual report – Cumulative report of all monthly data
   1. The report will be generated for the current financial year
3. Conference report – Proforma I
4. Conference report – Proforma II

## Area Councils

### Landing page

The landing page will be similar to that of the Conferences as listed in section 7.4.1.

### Data entry – RECEIPTS

The receipts data entry will be similar to Conference as listed in section 7.2.2

### Data entry - PAYMENTS

The voucher data entry will be similar to Conference as listed in section 7.2.3

### Data entry – Area Council details (Not to be considered)

The data entry will be similar to the Conference as listed in section 7.2.4

### Data Entry – Minutes of Meeting (Not to be considered)

The data entry will be similar to the Conference as listed in section 7.2.5

### Reports

The reports will be similar to the Conference as listed in section 7.2.6

1. In addition, it will have the field (Combo box) to choose any conference which belongs to the Area council. The values of the combo box will be filled from the master data for each Area council’s composition.
2. The Area council can VIEW only the reports for any of the conferences listed under their council.
3. The area council can generate their payments and receipts reports, similar to that of the conference as listed in section 7.3.6
4. The area council can generate the reports as required to be submitted to the central council

## Central Council

### Landing page

The landing page will be similar to that of the Area council as listed in section 7.4.1, with the following differences/additions.

1. It will have an additional button to import files for the Tally system.
2. It will have combo box to list area councils or conferences, which belong to the central council

### Data entry – RECEIPTS

The receipts data entry will be similar to Conference as listed in section 7.2.2

### Data entry - PAYMENTS

The voucher data entry will be similar to Conference as listed in section 7.2.3

### Data entry – Central Council details (Not to be considered)

The data entry will be similar to the Conference as listed in section 7.3.3

### Data Entry – Minutes of Meeting (Not to be considered)

The data entry will be similar to the Conference as listed in section 7.3.5

### Reports

The reports will be similar to the Area council as listed in section 7.5.6

1. It will have the additional field (Combo box) to choose any conference or area council, which belongs to the Central council. The values of the combo box will be filled from the master data for central council.
2. The Central council can VIEW only the reports for any of the conferences and area councils which belong to the central council.
3. The central council can generate their own receipts and payments reports, similar to that of the conference as listed in section 7.3.6
4. The central council can also generate the reports as required by the National council