

Distributed Polling System (DPS)

Team Members:

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What is DPS?

DPS: A Distributed Software system, helps to make business decisions

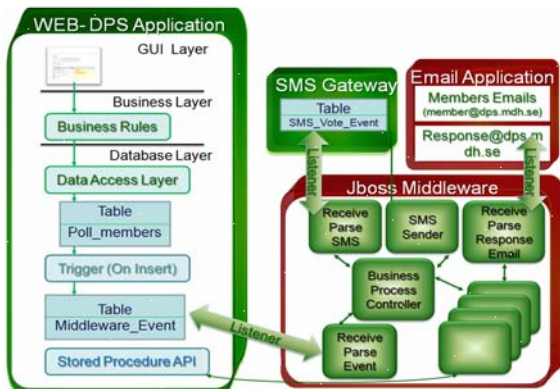
Business Scenario:

- Board of directors want to take a **business decision**
- Board Members are **traveling** across the world
- Members are **intimated** and response vote are captured through SMS or EMAIL
- System **automatically** calculate and announce results

Benefits:

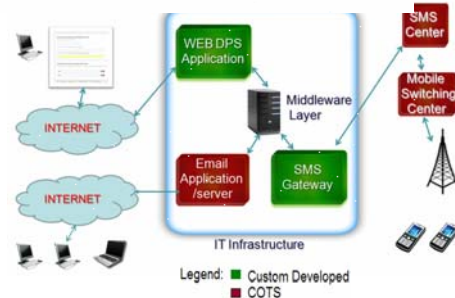
- **Efficient algorithms** driven voting result calculation and announcement
- **Instant intimation** to members located anywhere in the world by SMS or EMAIL

Low Level Architecture



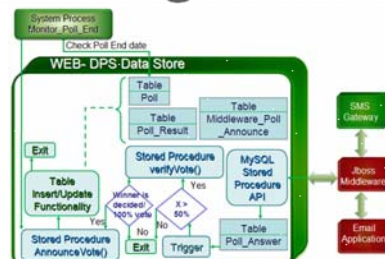
Based on Publish-Subscribe methodology

How DPS works?



Hub and Spoke architecture, Scalable and loosely coupled.
Security Aspects: HTTPS, DMZ, Digital Signature, password-protected PDF, capturing IMSI and MSISDN

DPS Algorithms



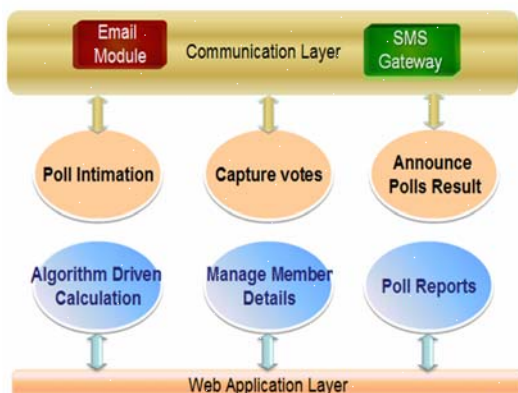
X: (Number of Members' vote received / Total Number of Members involved in voting) * 100

Algorithm for calculating result in One Choice Option

```

If (Number_of_Received_Votes > (Number_of_Voters / 2))
{
    Max1 = Vote_Count_Of_Maximum_Selected_Option;
    Max2 =
    Vote_Count_Of_Second_Maximum_Selected_Option_Among_Other_Options_Except_Max1;
    If (Max1 > Max2)
    {
        If (Max1 > (Max2 * Remained_Number_of_voters))
        {
            Final_Result = Option_Of_Max1
            announceVote();
        }
    }
}
    
```

Major Functionalities



Outcomes

