

**Benchmark Software Ltd**

**Project Proposal  
for  
DWASA Budget Software**

**Submitted By,**  
**Benchmark Software Ltd.**  
**7<sup>th</sup> floor-East Side,BDBL Bhaban,Karwan Bazar Dhaka-1215**  
**Phone: 01719892843**  
**Email: benchmarkltd@gmail.com**

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## **1.0 Abstract:**

Budget Software offers organizations many benefits including increased employee efficiency, productivity, and information security. However, there are numerous organizations, particularly small and medium-sized businesses (SMBs), which are still operating under a Budget centric environment. For these SMBs, Budget system could mean streamlining daily workflow while reducing overall costs. This annotated bibliography is comprised of literature published from 2007–2015 to help executives, managers, and users identify the benefits of and best practices in implementing a Budget system.

## **2.0 Introduction:**

Budget Software is a way of Annual Budget which is made through digital modes. In Budget Software, Annual Budget and Revised Budget both use digital modes. It is also called electronic Budget. All the Process in Budget are completed through online. It is an instant and convenient way to make budget.

## **3.0 The benefits of Budget Software:**

- Budget Software can be a critical touchpoint for many business-customer relationships. While help make Annual Budget and Revised Budget reminders more tangible.

## **4.Case tools:**

1. Rational Rose
2. Vision Professional
3. Er-Win
4. SD Pro
5. Case PAC

## **5.Programming Language and Package:**

1. Visual Studio
2. PL/SQL
3. Visual Basic
4. C
5. C++
6. Visual C++
7. Java
8. J++

## **6. Cold Fusion:**

1. C#
2. ASP.Net

## **7.Operating System:**

1. Linux
2. Windows NT
3. Solaris
4. Windows 7/8/8.1/10/11

## **8.Security Features and Access Control:**

Security is the perfect state where all data can be communicated over the web secure from unauthorized people being able to examine it and/or control it. Security bargains with the techniques utilized to preserve security inside a computer framework. Security is additionally the process of avoiding and recognizing unauthorized utilize of one's computer. Application security is the utilize of computer program, equipment, and procedural strategies to secure applications from external threats. Security measures built into applications and a sound application security routine minimize the probability that programmers will be able to control applications and get to, steal, modify or erase touchy information. Once an untimely idea in program plan; security is becoming a progressively critical concern amid improvement as applications gotten to be more frequently accessible over systems and are, as a result, powerless to a wide assortment of dangers.

## **9. Auditing:**

Inspecting is the method of logging endeavors to get to assets or alterations to information. Since auditing carries a tall execution hit due to the overhead required for confirming and logging auditing data, but it gives profitable data concerning security issues or modifications to delicate information.

## **10.Blame Tolerances:**

proposed framework we emphatically recommend blame resistance execution in both hardware and program of the application framework.

Our recommendations for blame resilience's are as follows:

- **Equipment Blame Resistance:** Equipment blame resistance will be executed by RAID configuration of Disk Reflecting with striping.

- **Program Blame Resilience:** Program blame resilience would be executed utilizing Oracle Server. This implies, within the occasion of an blunder, all data can be reestablished to its earlier state without reestablishing to reinforcements or being required to know the previous information. Disaster Management There may well be major fiascos due to surge, fire, seismic tremor or any other common calamity causing total misfortune of the profitable information chronicles. This must be tended to by receiving the following measures:

For guaranteeing database and picture security, we propose to preserve at slightest two reinforcements of the entire database in Tape and CDROM to be kept exterior the preface of Venture office in a remote location. Furthermore, a reinforcement server

ought to be considered for guaranteeing an un-interrupted operation of the framework in a few calamity occasions.

### **11.Authentication:**

Application verification is built around the concept of role-based participation of the users. Few database tables specifically Client, User Group, User Log, Page, Field, Field User are outlined to implement the application security. The Super client or Database Overseer or director can manage the security highlights like:

- Make a modern client account
- Alter watchword of a user
- Make Client Group
- Relegating or changing a user's part membership
- Regulate get to rights for a user
- Regulate get to Will have rights for a role moreover get to to track & see the history log, from where Super client can monitor final altered individual data with date & time in which form/record, the person has changed or overhauled data.

### **12. Support Services:**

Support services for the software consist of technical support and assistance by e-mail or telephone to the user. These services include receiving, classifying, and logging support requests, and the assignments thereof to the technical experts and project managers who are responsible for troubleshooting the problem until it is resolved.

#### **A problem is considered resolved when:**

- The software conforms substantially to its specifications; or
- The user has been advised on how to correct or bypass the error through telephone; or
- Security issues or any other software problem/defect is fixed by the Maintenance Professionals within the specified time frame.

The Support Team will support the user by call handling and problem resolution as well as call classification and escalation. Any sort of software problem is fixed within 3 days; and in case of security issues (including virus attacks and other security problems) are fixed within 72 hours.

### **13.BACKUP DATABASE:**

To ensure data are not lost, we can use the standard backup procedure-

- Replication between multiple servers.
  - In local or network directory or in remote location.
  - DVD (storage device) can be used to store the periodic data and
- Keep in separate location/area. Later it can be retrieved from DVD if any hazard occurs.

## 14. Performance Requirements

Performance should not be an issue because all of our server queries involve small pieces of data. Changing screens will require very little computation and thus will occur very quickly. Server updates should only take a few seconds as long as the phone can maintain a steady Signal. The cost-division algorithms used by in application will be highly efficient, taking only a fraction of a second to compute.

| No | Requirement Text / Data                                      | Acceptability      | Limitations                        |
|----|--------------------------------------------------------------|--------------------|------------------------------------|
| 1  | All report loading from server response time should me limit | Avg. 10 to 45 Sec  | For a big data need high band with |
| 2  | Blob data process                                            | Avg. 30 to 120 Sec | Need high band with                |

## 15. Technologies to be used:

| SL  | Tools/Technology                          | Features                              |
|-----|-------------------------------------------|---------------------------------------|
| 1.  | Software Development Mythology            | Agile Scrum                           |
| 2.  | Operating System                          | Windows/Linux                         |
| 3.  | Architecture                              | Micro service                         |
| 4.  | Backend Technology                        | Java (Spring Boot), C#, Visual Studio |
| 5.  | Frontend Technology                       | ASP.NET                               |
| 6.  | Database                                  | SQL Server                            |
| 7.  | Web Server                                | Apache Tomcat or Jetty                |
| 8.  | API                                       | REST                                  |
| 9.  | Load Balancer                             | Nginx                                 |
| 10. | Microservice Registration Discover Server | Eureka                                |
| 11. | Deployment Process                        | Docker/Kubernetes                     |
| 12. | In Memory Caching                         | Redis                                 |

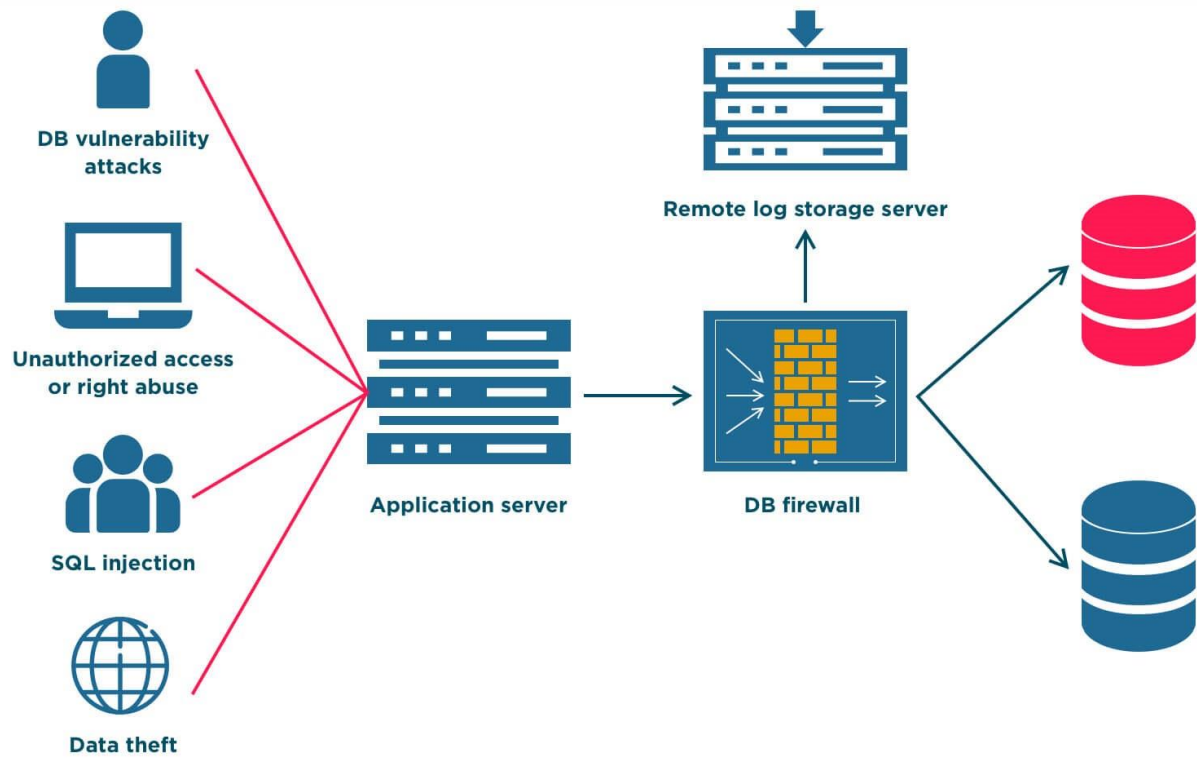
## Database Server Specification

|                                   |                                                                                                                  |
|-----------------------------------|------------------------------------------------------------------------------------------------------------------|
| Base                              | PowerEdge R740 Server                                                                                            |
| Motherboard                       | PowerEdge R740/R740XD Motherboard                                                                                |
| Chassis Configuration             | Chassis with up to 16 x 2.5" SAS/SATA Hard Drives for 2CPU Configuration                                         |
| Processor                         | 2 x Intel® Xeon® Gold 5218 2.3G, 16C/32T, 10.4GT/s, 22M Cache, Turbo, HT (125W) DDR4-2666                        |
| Memory Capacity                   | 256GB (4 x 64GB) RDIMM, 3200MT/s, Dual Rank                                                                      |
| RAID Configuration                | C7, Unconfigured RAID for HDDs or SSDs (Mixed Drive Types Allowed)                                               |
| RAID/Internal Storage Controllers | PERC H730P+ RAID Controller, 2GB NV Cache, Adapter, Low Profile                                                  |
| Hard Drives                       | 7 x DELL 2.4TB 2.5 INCH 10K SAS 12GBPS HARD DISK DRIVE<br>2 x 1.92TB SSD SAS 12Gpbs RI 2.5in Hot-Plug Hard Drive |

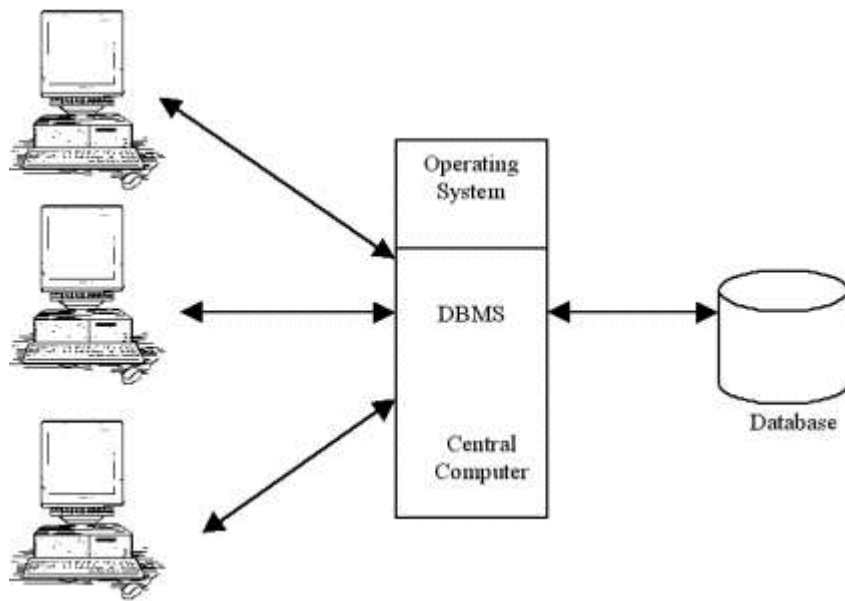
## 16.0 Project Time Line:

| SL.                           | Activity                                                                                                                                          | Time     |
|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|----------|
| Phase 1: Development          |                                                                                                                                                   |          |
| 1.                            | Conduct background scoping and research work and finalizing the system requirement.                                                               | 3 Months |
| 2.                            | Development of the software including mentioned features, dashboard, report etc. to incorporate client requirement as per approved Documents.     | 7 Months |
| 3.                            | Testing, debugging, update                                                                                                                        | 2 Months |
| 4.                            | Delivery of software and 2 <sup>nd</sup> level feedback collection.                                                                               | 2 Months |
| 5.                            | Delivery of the final version of the system along with all required documentation including source code, user manual and technical documentation. | 1 Months |
|                               | Sub Total                                                                                                                                         | 15 Month |
| Phase 2: Free Support Service |                                                                                                                                                   |          |
| 7.                            | Provide required and necessary support & maintenance                                                                                              | 5 Months |

## 17. Application Architecture



## 18. Database System- Types of Databases:



## 19. Estimated Budget

Total development, integration and implementation time duration =1.5(One & half Year).

| Serial | Description                                          | Amount    |
|--------|------------------------------------------------------|-----------|
| 1.     | Requirement Collection and GAP Analysis              | Free      |
| 2.     | Development and customization (Applicable only once) | 32,00,000 |
| 3.     | 1 (one) month Test operation                         | Free      |
| 4.     | 2 (Two) months support service after implementation  | Free      |
| Total  |                                                      | 32,00,000 |

**In word: BDT Thirty-Two Lack Taka Only**

## 20.Maintance Budget:

| SL No                                             | Name of Service                                                                                    | Offered price (Taka) |
|---------------------------------------------------|----------------------------------------------------------------------------------------------------|----------------------|
| <b>Maintenance, Follow up and support service</b> |                                                                                                    |                      |
| 01.                                               | Maintenance, Follow up and support service (Yearly)                                                | 70,00,00             |
| 02.                                               | Change request management (Per man-day) (Upgradation, Feature addition or Functional modification) | 55,00                |

**Note: All prices are VAT & TAX included**

## **21.Conclution:**

In future the digital payments are going to be a must and so the change in the habits of the people to accept the digital payment is also must. The cashless transition is not only safer than the cash transaction but is less time consuming. It also helps in record of the all the transaction done. Bangladesh has more than 10 crore active mobile connections and more than 8 crore smart phone users as of March 2022. This number is going to increase further with a faster internet speed. The reach of mobile network, Internet and electricity is also expanding Digital payments/Bill to remote areas. So, it is without doubt.