

Small Business Cost-Saving Simulator

A React-based web application designed to help small businesses (\$5M-\$50M revenue, 25-200 employees) discover hidden cost-saving opportunities through strategic optimization.

Features

- **Interactive Business Profiling:** Input your company's key metrics
- **Monte Carlo Simulation:** Advanced statistical modeling for accurate projections
- **Lead Capture:** Built-in form for business development
- **Cost Breakdown Analysis:** Visual representation of current spending
- **Strategic Insights:** Tailored recommendations for small businesses
- **Report Generation:** Downloadable analysis reports

Technology Stack

- **React 18** - Frontend framework
- **Tailwind CSS** - Styling and responsive design
- **Recharts** - Data visualization and charts
- **Lucide React** - Modern icon library
- **GitHub Pages** - Deployment platform

Getting Started

Prerequisites

- Node.js (version 18 or higher)
- npm or yarn package manager

Installation

1. Clone the repository:

```
bash
git clone https://github.com/yourusername/small-business-cost-simulator.git
cd small-business-cost-simulator
```

2. Install dependencies:

```
bash
```

```
npm install
```

3. Start the development server:

```
bash
```

```
npm start
```

The application will open in your browser at `http://localhost:3000`.

Building for Production

```
bash
```

```
npm run build
```

This creates a `build` directory with production-ready files.

Deployment to GitHub Pages

Automatic Deployment (Recommended)

1. Update the `homepage` field in `package.json`:

```
json
```

```
"homepage": "https://yourusername.github.io/repository-name"
```

2. Push your code to the `main` branch. The GitHub Actions workflow will automatically:

- Build the project
- Deploy to GitHub Pages

Manual Deployment

1. Install gh-pages (if not already installed):

```
bash
```

```
npm install --save-dev gh-pages
```

2. Deploy to GitHub Pages:

```
bash
```

```
npm run deploy
```

GitHub Pages Setup

1. Go to your repository settings
2. Navigate to "Pages" in the sidebar
3. Under "Source", select "GitHub Actions"
4. The site will be available at `https://yourusername.github.io/repository-name`

Project Structure

```
src/
├── components/
│   └── SmallBusinessCostSimulator.js # Main application component
├── index.css           # Global styles with Tailwind
├── index.js            # React entry point
└── App.js              # Root component

public/
├── index.html          # HTML template
└── manifest.json       # PWA configuration

.github/
└── workflows/
    └── deploy.yml      # GitHub Actions deployment
```

Customization

Branding

- Update company information in the header and footer sections
- Modify contact details and phone numbers
- Adjust colors in `tailwind.config.js`

Business Logic

- Modify simulation parameters in the `runSimulation()` function
- Adjust cost categories in `getBreakdownData()`

- Update business insights and recommendations

Styling

- All styles use Tailwind CSS utility classes
- Custom styles are defined in `src/index.css`
- Responsive design works on mobile, tablet, and desktop

Features Overview

Lead Generation Flow

1. **Contact Form:** Captures essential business information
2. **Business Profiling:** Interactive sliders and selects for key metrics
3. **Results Display:** Comprehensive analysis with visualizations
4. **Call-to-Action:** Strategic booking and download options

Business Intelligence

- **Monte Carlo Simulation:** 3,000 iterations for statistical accuracy
- **Risk Assessment:** P10, P50, P90 percentile projections
- **Visual Analytics:** Pie charts and bar graphs for data representation
- **Strategic Recommendations:** Tailored advice for small businesses

Technical Features

- **Responsive Design:** Mobile-first approach
- **Performance Optimized:** Lazy loading and efficient rendering
- **SEO Friendly:** Meta tags and semantic HTML
- **Accessibility:** WCAG compliant with proper ARIA labels

Business Use Case

This simulator is designed for business consultants and coaches who want to:

- Demonstrate value to potential small business clients
- Generate qualified leads through valuable tools
- Provide immediate insights while capturing contact information
- Establish credibility through sophisticated analysis

Contributing

1. Fork the repository
2. Create a feature branch (`git checkout -b feature/amazing-feature`)
3. Commit your changes (`git commit -m 'Add amazing feature'`)
4. Push to the branch (`git push origin feature/amazing-feature`)
5. Open a Pull Request

License

This project is licensed under the MIT License - see the LICENSE file for details.

Support

For questions about implementation or customization:

- Create an issue in this repository
- Contact: Wilts Alexander at 678-428-5997

Acknowledgments

- Built for small business optimization and growth
- Designed with strategic consulting best practices
- Optimized for lead generation and client engagement