Level 1 🡪 Level 2

1. It attempts formalize information availability requirements

Some of the Tips for Successful Requirements Gathering:

* Establish Project Goals and Objectives Early.
* Document Every Requirements Elicitation Activity.
* Be Transparent with Requirements Documentation.
* Talk To the Right Stakeholders and Users.
* Don't Make Assumptions About Requirements.
* Confirm.
* Practice Active Listening.

Why Information system are imp for business

Any business can be successful only when there is a consistent management of organizational and financial data with efficient information systems. Most of the companies have seen a drift in the process of workflow due to the accuracy and reliability. There is no alternative for the right information at the required time in the world of business where every industry revolves round the "Internet of Things"

This raised the need to innovate and develop the systems that can be implemented to make information accurate, that can be quickly accessed on demand. An effective information system can entitle an organization with better planning, decision-making and hence desired results.

How does Modern Business influence Information Systems?

With the constant change and evolution of customer preferences and requirements – businesses that can bring about new methods and innovative techniques can survive the market and continue to function as per the customer demands. The implementation of information system can benefit a lot in businesses and helps in controlling the internal and external processes.

Following are the benefits of information system

**New Products and Services**

Any business striving to enhance and to give a strong hold on the future has to instill a well organized Business Information System. An IS can help in analyzing independent processes and enables organized work activities. Hence an information system entitles the companies to understand how the company generates, develops and sells the services or products.

**Information Storage**

Keeping a log of activities is important for all the organizations, to understand the reason for the problems and so to provide solution to the same. Business Information System makes it simple to store operational data, revision histories, communication records and documents. The storing of data manually involves a lot of time and money. A sophisticated Information system stores the information in the database which simplifies the process of finding the data easily.

**Simplified Decision Making**

Business Information System, eases the process of decision making and simplifies the process of delivering the required information and hence assists in taking better decisions instantly.

**Behavioral Change**

Business Information System can be effectively implemented to help communication better between the employers and the employees. Information Systems work better as it stores documents and files in folders that can be accessed and shared by the employees. This ensures to oversee the flow of information between the management and the lower-level employees. This also allows the the front-line employees to be a part of the decision-making process and hence feel motivated and committed towards doing a task.

three key steps you can take to improve the quality of information in your business:

* Determine information purpose and priority by aligning information to one or more of the process elements in your core business process.
* Agree one version of the 'truth'.
* Define information governance and assign ownership.

How do information systems improve relationships between businesses and customers?

Systems tracking customer activity, such as purchasing trends and product defects, collect and analyze customer data. Customer relationship management (CRM) systems provide the means for customers to communicate with companies and offer feedback on products or services.

For detail explanation: <https://www.nstec.com/technology/which-type-of-information-system-supports-the-interaction-between-a-firm-and-its-customers/>

Reference: <https://www.altexsoft.com/blog/business/functional-and-non-functional-requirements-specification-and-types/>

<https://one.comodo.com/blog/msp/why-business-information-systems-are-important.php>

<https://www.sciencedirect.com/science/article/pii/S2590005620300151>

1. Progress is hampered by culture; inconsistent incentives

**Change Your Organizational Culture:**

* Define desired values and behaviors.
* Align culture with strategy and processes.
* Connect culture and accountability.
* Have visible proponents.
* Define the non-negotiables.
* Align your culture with your brand.
* Measure your efforts.
* Don't rush it

**Improve Workplace Culture:**

* Build strong employee relationships.
* Connect people to a purpose.
* Encourage frequent employee recognition.
* Create positive employee experiences.
* Open up transparency and communication.
* Give teams the autonomy they seek.
* Schedule regular and meaningful one-to-ones.

10 tips for driving a culture change:

* Define desired values and behaviors.

Do people understand them and how they relate to day-to-day behavior? Come up with behavioral descriptors for each value you define and articulate how those would translate into actionable behaviors at all levels—from secretaries to middle managers to executives.

* Align culture with strategy and processes.

Do your mission, vision and values line up with your HR processes, including hiring, performance management, compensation, benefits and the promotion of talent?

* Connect culture and accountability.

It is easy, particularly in difficult times, to forget the values you set in place to define your company, he says, citing Enron and WorldCom as examples. However, companies have a better chance at weathering disaster if they take responsibility for their actions.

* Have visible proponents.

For culture change to stick, it must be a priority of the CEO and board of directors. “Show the board a framework for understanding organizational culture and its impact on performance. Work with the board to create a standing performance objective for the CEO that evaluates culture.

* Define the non-negotiables.

When contemplating a culture change, look at your current culture and call out which aspects you want to retain. Determining what’s not up for debate is particularly important during mergers and acquisitions, when leaders of two or more organizations must figure out how to blend identities.

* Align your culture with your brand.

Culture must resonate with both employees and the marketplace. To accomplish this, HR increasingly is partnering with marketing, he says. This is especially relevant in our current online world, where today’s bad customer experience can become tomorrow’s viral sensation.

* Measure your efforts.

Help demonstrate the effectiveness of your efforts by implementing employee surveys and analyzing gaps between desired and actual behavior.

* Don’t rush it.

Changing a culture can take anywhere from months to several years. Start by making sure there’s a clear rationale for why the company should change.

* Invest now.

Don’t wait for staff and resources that may never come. “It takes years of investment to get to that point where [your culture] just automatically becomes part of how you behave and act,” so begin whatever way you can.

* Be bold and lead.

You don’t have to be in a position of influence to have influence. “When we step up, it encourages others to step up as well.

Business Culture Improvement: <https://www.shrm.org/resourcesandtools/tools-and-samples/toolkits/pages/understandinganddevelopingorganizationalculture.aspx>

Reference: <https://www.shrm.org/hr-today/news/hr-magazine/1016/pages/how-to-change-your-organizational-culture.aspx>

**Incentives increase performance:**

Incentives increase performance by boosting the value people assign to work goals,

causing them to make stronger commitments to those goals and achieve them.

The program has to provide the meaning, rewards, communication, and support that foster a sense of value.

**Give performance-based incentives.**

To boost employee morale, Lee suggested creating career opportunities for your employees by promoting internally before seeking external hires for senior positions, and by providing opportunities for employees to change teams based on their skill sets and interests.

By doing so, you will encourage employees to work hard, develop their skills and advance their careers. You should also give monetary performance-based incentives, like employee bonuses and raises, whenever you have the financial means. This will encourage hardworking employees to stick with your company instead of seeking other career opportunities with higher pay. It helps to boost company’s moral.

When Bonus Incentives Go Bad—and How to Prevent It: <https://www.shrm.org/resourcesandtools/hr-topics/compensation/pages/bonus-incentives-gone-bad.aspx>

1. Organizational Barriers and lack of leadership

Overcome the Organizational Barriers , read this full article : <https://harappa.education/harappa-diaries/examples-of-organizational-barriers-to-communication/>

<https://blog.perceptyx.com/six-barriers-to-success>

Lack of Leadership: <https://www.instantoffices.com/blog/business-growth/15-ways-improve-leadership-skills-work/>

<https://www.gbscorporate.com/blog/the-cost-of-poor-leadership-on-your-revenue-and-culture>

<https://www.superbeings.ai/blog/tips-to-improve-leadership-effectiveness>

1. Strategy is over 100 pages but not business relevant

A business strategy, in simple terms, is a documented plan on how an organisation is setting out to achieve their goals. A business strategy contains a number of key principles that outlines how a company will go about attaining these goals. For example, it will explain, how to deal with your competitors, look at the needs and expectations of customers, and will examine the long-term growth and sustainability of their organisation.

The reason why having a strategy is so important is because it gives business time to get a sense of how they are preforming, what their capabilities are, and if these capabilities are able to help them grow.

**Business strategy**

Not all businesses get it right straight away. There are natural weaknesses within all organisations for various reasons. What a business strategy does is try to remedy these weaknesses so that companies don’t trip up and suffer their impact too greatly. Strategies look at these future risks and help develop ways in which they can overcome these obstacles.

Here are some reasons why having a strategy is important:

**Guide**

A well-defined business strategy will offer a guide on how your business is performing internally. Also, how you are performing against your competition and what you need to stay relevant into the future.

**Trends**

A strategy can identify trends and opportunities in the future. It can examine the broader changes in market such as political, social or technological changes, as well as consumer changes, and can develop tactics so your business can modify and develop to suit these future changes.

**Vision**

A business strategy creates a vision and direction for the whole organisation. It is important that all people within a company have clear goals and are following the direction, or mission of the organisation. A strategy can provide this vision and prevent individuals from losing sight of their company’s aims.

**Competitive Advantage**

Finally, by creating a business strategy a company can create a competitive advantage and ultimately understand more about themselves and where they are going.

Developing a business strategy in 10 steps

1. Develop a true vision.

Vision is an abstract word that means different things to different people. Classically, a vision or vision statement is a snapshot into the future. It should include aspirations of what type of company you want to be, and, unlike a mission statement, articulates what success looks like in clear terms (customers, markets, volume, etc.).

2. Define competitive advantage.

At the essence of strategy is identifying how a company can deliver unique value to its customers. In many sectors of the economy, companies are stuck in a sea of sameness. A well-thought-out business strategy should consider how a company can create space from competition in its service offering, pricing model, delivery system and more.

3. Define your targets.

One of the most significant barriers to growth is poor targeting. Absent of very specific targets, companies suffer from unclear messaging and thus misalignment between sales and marketing. Defining niches and specialties allows companies to focus resources (of course, some companies are generalists by design).

Clear target markets give a company the ability to create an integrated sales and marketing approach, where marketing enables sales productivity. Sales and marketing plans are executed more effectively when targets are tight.

4. Focus on systematic growth.

As one of our Vistage member clients says, “A thriving company is a growing company.” It is only through growth that companies can afford to invest in things like technology, the best people and new equipment. The strategic plan should identify in which segments a company will grow and in what proportion, so that the product mix yields a specific net margin result.

Only after coming to such conclusions could a company know how much it can afford in terms of capex, overhead expenses and so on.

5. Make fact-based decisions.

Strategy is a garbage in, garbage out exercise. Executives often complain about a lack of good data, but we consistently find information that is useful in the formation of strategy.

We once worked with a Vistage member who was trying to quantify the value of various segments served. By accessing the public records of a nearby port, we were able to quantify actual shipments of merchandise by potential customers.

6. Think long term.

In the face of constant change, planning horizons are shorter than they used to be. However, only thinking quarter to quarter is a trap that may rob companies of their ability to see around the bend. Best-in-class companies create processes designed to treat strategy as an annual cycle rather than a one-time, static event.

7. But, be nimble.

Companies can think long term and still be nimble. For example, a critical component of strategy is an external forces analysis. Companies should be evaluating long-term external forces, and adapting based on new information (meeting regularly-perhaps quarterly) to pivot.Jeff Bezos of Amazon holds a strategy meeting every Tuesday to keep it front and center with his management team.

8. Be inclusive.

To be nimble, companies are including different people in their strategy than in the past. At a time when companies are hiring more millennial employees, there is greater transparency. While I am never one to advocate that companies open their books (as that is a personal decision for the entrepreneur), there is certainly movement toward more inclusion and transparency.

Deciding who to include in strategy formation is a critical selection. We recommend business owners include people they can trust and that can think strategically.

9. Invest time in pre-work.

If you want your managers to take strategy seriously, make them conduct research and prepare relevant information in advance of your strategy meetings.

10. Measure your results and execute excellently.

Every strategy should be actionable. Companies that are best-in-class:

* Have a strategic action plan that they track often (usually monthly).
* Promote common ownership of the plan across executives and departments.
* Utilize key performance indicators (KPIs) that are predictive and align directly with the strategic plan.
* Have cascading goals that reach every department and resonate with employees so they understand how their role contributes to the greater good.
* Set up their corporate calendar to promote productive meetings, and establish a performance management cycle that supports cascading goals and objectives to every employee.
* Rinse and repeat their strategy cycle every year.

The execution of strategic planning requires discipline, and it is the responsibility of senior executives to promote processes that keep a team focused on the prize.

For Detail read this: <https://www.mckinsey.com/business-functions/strategy-and-corporate-finance/our-insights/how-to-improve-strategic-planning>

<https://smallbusiness.chron.com/strategies-improve-business-4619.html>

Reference: <https://www.vistage.com/research-center/business-leadership/strategic-planning/20181105-10-steps-building-best-business-strategies/>

<https://evolve.ie/q-and-a/business-strategy-important/>

1. Data quality and insight efforts but still in silos

**Data Quality**

1. Improve data collection.

Your big data analysis begins with data collection, and the way in which you collect and retain data is important. Your company can amass huge quantities of data in a short period of time, but not all of that data is relevant for analysis. Start by defining the types of data that are important to your company. Think about the behaviors among shoppers that are of the greatest pertinence to your overall business, so you can hone in on the most useful behavior-related data.

2. Improve data organization.

Once you have a strategy in place for improving data collection, you need a method for storing and managing that data. Meticulous data organization is pertinent for analysis, and it will enable you to remain in control of data quality while improving the efficiency of analysis.

3. Cleanse data regularly.

Dirty data is perhaps the biggest culprit of low-quality data and poor data analysis. Data cleansing is imperative and will help to ensure data analysis is centered around the highest quality, most current, complete, and relevant data.

4. Normalize your data.

When data is collected from a variety of different sources, it often contains inconsistencies or errors in terms of how different words are spelled. For instance, when entering a country name, the United States often appears written out or as U.S or U.S.A. These small derivations can actually have a big impact on data analysis. You need to create a standard for all data to adhere to, so your data remains uniform throughout.

5. Integrate data across departments.

Data silos are like a black fog in the marketing world, sabotaging the analysis efforts of marketers and clouding their view of the customer. You need a data management platform that will make it easy to integrate all departmental data into a single platform, so you can eliminate silos and achieve greater accuracy in data analysis.

6. Segment data for analysis.

If your data is clean, well-organized, and free of silos, but still isn’t making any sense, the next step is to segment your data for a more detailed and focused analysis. Consider what you’re trying to achieve from data analysis and what specific questions you want to answer. Then you can sort data into relevant groupings to analyze trends within the various data subsets. Not only does this make data analysis easier by breaking the information down into smaller, more digestible chunks, but it also improves accuracy, enabling you to hone in on highly specific trends and behaviors.

Gartner’s Data Quality Article : <https://www.gartner.com/smarterwithgartner/how-to-improve-your-data-quality>

Five critical practices to improve data quality

1. Eliminate silos

Siloed data will never deliver its true value. With silos, it’s impossible to get a complete view of your business and to have a single source of truth. With data isolated, users in different departments duplicate their data instead of sharing it, which creates confusion, inconsistencies, and lost agility. By eliminating silos, everyone in your organization can see all your data all at once and have a single source of truth.

2. Make data accessible to all your users

Though data has traditionally been owned by specific business units that collect and use it for their own purposes, this approach produces narrow-minded results that don’t benefit the business as a whole. Data should to be made accessible to all types of users across the organization. The true value of data can only be realized when 100% of your data is available to 100% of your users.

To truly achieve data-driven success, businesses need to encourage collaboration between business units and shift to an enterprise-focused approach. When everyone in every department can ask cross-functional questions and work off a single source of truth, there can be more insights and innovation.

3. Use the right data

Data quality is about more than accessibility — it’s about relevancy. The best data combines multiple sources to create a broad and complete view of the organization, so you can answer the most complex questions. By tapping into diverse and creative data sources, you can gain a competitive advantage that will help your business grow and find success.

4. Secure your data

Safeguarding your data is critical to ensuring customer trust and business security. And with the amount of data flowing into modern organizations, keeping it all accessible for necessary users yet protected is a key differentiator for successful businesses. To keep your data secure while allowing access within the organization, develop a data analytics ecosystem that focuses on managing vulnerabilities, encryption, and authentication, as well as role-based access and fine-grain security controls.

5. Treat data quality as a process

Creating value from data is more than just delivering “one off” insights. While an established data management system helps, businesses need to cleanse and maintain their data, and build rigor around these practices. True success requires operationalizing your data, and continually reevaluating how your data can work for you and what data and data analytics processes serve your business. Everything from data storage to analysis to application needs to be streamlined, managed, and automated.

Becoming future-ready

Inadequate data — whether it’s the wrong data for the job, or just inaccessible or inaccurate — will compromise the entirety of your data and prevent you from making informed business decisions. Data quality lays the groundwork for all data-driven outcomes, and the quality of your data will determine the caliber of the insights you’re able to derive.

To truly become future-ready, create an effective and widely adopted data culture with a modern data analytics platform that can accommodate unlimited users and concurrency, continually optimize, and help create insights and drive outcomes.

**Data Silos**

How to break down data silos in 4 steps

The solutions to silos are technological and organizational. Centralizing data for analysis has become much faster and easier in the cloud. Cloud-based tools streamline the process of gathering data into a common pool and format for efficient analysis. What once took weeks, months, or years can now be accomplished in days or hours.

1. Change management

If company culture can create data silos, it's also the key to breaking data silos down. Communicate the benefits of data sharing and data integrity so that workers understand the shift. Also communicate the problems with silos, including data quality problems and the need to stay competitive. Culture change is a big undertaking, so management must show commitment.

2. Develop a way to centralize data

In the realm of data management systems, the best way to bust silos is to pool all corporate data into a cloud-based data warehouse or data lake — a central data repository optimized for efficient analysis. Data from disparate sources will be homogenized and consolidated, and access can be easily granted to individuals or groups to balance business need against privacy and security.

3. Integrate data

Integrating data efficiently and accurately is a guaranteed method to preventing future data silos. Organizations integrate data using one of several methods:

* Scripting

Organizations can task IT with writing scripts in SQL, Python, or other scripting languages to move data from siloed data sources and into the warehouse. The downside to scripting is it can be complex. As data sources grow, complexity grows. Changes in data sources require scripts to be updated. Maintenance of hand-coded integration becomes a cost and time burden for IT professionals.

* On-premises ETL tools

ETL (extract, transform, and load) and ELT tools automate the process of moving data from various sources to the data warehouse. These tools extract data from sources, transform data into a common format for analysis, and load the result into a data warehouse located in the organization’s data center.

* Cloud-based ETL

The cloud and data go hand in hand, and sophisticated cloud providers are making the ETL process easier and faster. Cloud-based ETL takes advantage of the cloud provider’s infrastructure — including a data warehouse and ETL tools designed to work efficiently in their environment. ETL breaks down silos by providing the technological means to gather data from different sources into a central location for analysis. ETL helps handle data integrity issues so that everyone is always working with fresh data.

4. Establish governed self-service access

When data is centralized and integrated, you also create the opportunity to centralize data access and control with a data governance framework. Robust data access policies facilitate self-service analysis, so business users with permission can easily access the data they need, without the headaches or delay necessary when IT personnel must serve as gatekeepers.

The cloud and the future of data storage

The cloud has emerged as a natural way to centralize data from diverse sources to make it easily accessible from the office, at home, on the road, or by branch operations.

Cloud data solutions help eliminate the technology barriers to collaboration and offer a ready solution for connecting siloed data. Using an established ETL process to strip away irrelevant data and eliminate duplication, organizations can quickly add new and updated data to a cloud data warehouse. This enables different departments to work collaboratively with fresh, clean, and timely data in a single, accessible platform that scales to meet demand.

Cloud technology and cloud data warehouses connect disparate business units into a cohesive ecosystem. Data analysts get a better view of how their work affects the whole organization, and how everyone’s work affects each other. Access to enterprise-wide data gives analysts a 360-degree view of the organization.

Tearing down data silos

Data silos undermine productivity, hinder insights, and obstruct collaboration. But silos cease to be a barrier when data is centralized and optimized for analysis. Cloud technology has been optimized to make centralization practical.

Thousands of organizations worldwide choose to centralize data in the cloud with Talend Data Fabric, because Talend simplifies data integration ETL, data governance, security, and regulatory compliance while providing silo-busting access to data by every department. For example, Covanta — a sustainable waste-to-energy supplier — prioritized overcoming data silos so they could better collect, govern, transform, and share data. Once departments across the company were communicating in real time with a shared source of truth, they could easily find and cut inefficiencies. Convanta slashed the cost of maintenance activities alone by 10% per year.

Talend Data Fabric enables users across the organization to collaborate using a comprehensive suite of apps — one solution for simplifying the process of busting silos forever. You can try Talend Data Fabric to see for yourself how Talend can partner with you to banish silos, improve operations, and boost profits across a variety of use case. We'll help you break down data silos and ensure that decision-makers across your organization always have a full understanding of company data.

Reference: <https://status.net/articles/data-silos-information-silos/>