

Measuring Productivity

Measuring productivity is a vital step in improving your company's performance. It not only allows you to assess your current performance but also to measure the impact of any changes you might make in your firm. Measuring productivity is not as difficult as you might think! Consider this example:

ACE Stationery Company produces many products, including including customised business cards. They recognised the advantages of improving productivity and decided to measure the current productivity levels of the business card making process.

The following table outlines the inputs used in the production of a box of 1,000 customised business cards selling at €250. It also outlines the 'target' input per box, the 'actual' input per box produced and the degree of efficiency of utilised inputs. All the results are below 100% which indicates that there is room for improvement in input utilisation:

	Target input per box (TQ)	Actual input per box (AQ)	Efficiency of input (TQ ÷ AQ)
Labour (€10/hr)	1 hour	1.5 hour	67%
Materials (€2.50/unit)	20 units	20.5 units	97.5%
Energy (€0.16/unit)	250 units	252.5 units	99%
Capital (€0.02/unit)	90 units	92.5 units	97%

To assess their productivity, ACE Stationery must now examine the ratio of output to total inputs used.

Input	(Target Quantity *Price) €	(Actual Quantity * Price) €
Labour (Q*€10)	10	15
Materials (Q*€2.50)	50	51.25
Energy (Q*€0.16)	40	40.40
Capital (Q*€0.02)	1.8	1.85
Input	101.80	108.5

Output	(Target Quantity * Price) €	(Actual Quantity * Price) €
Box of Business cards (1*250)	250	250

Productivity				
Output ÷ Input	250 ÷ 101.8 =	250 ÷ 108.5 =		
	2.45	2.30		

^{*} This is the methodology used by ACE Stationery and may have to be modified to suit your circumstances.

The actual productivity score (ratio of output to input) for ACE is 2.30. This compares to the target productivity score for ACE of 2.45. ACE Stationery must consider how they can improve the efficiency of their inputs to improve their productivity score. The 'Efficiency of input' column in the box 1 will give ACE an indication of the areas where improvements could be made.

Expressing this productivity performance in accounting terms, the target gross margin for ACE Stationery is: $(2.45 - 1.018) \div 2.45 = 58$ per cent while the actual gross margin equals: $(2.30 - 1.085) \div 2.30 = 53$ per cent.

Other Measures

Some examples of other productivity measures that you can use are:

- · Overall Equipment Efficiency;
- · Total Effective Equipment Performance;
- Overall Labour Effectiveness;
- Total Productive Maintenance;
- Absolute Waste.

Companies can formulate key performance indicators throughout the organisation that encompass all performance and productivity measures.

These include:

- · Turnover per employee;
- Value added per employee;
- · Labour efficiency against industry standards;
- Output versus employee hours;
- Output versus capital costs;
- · Cost per unit;
- · Material yield.

If relevant information is available, you can use these indicators to benchmark performance against your competitors.

This chart illustrates some simple steps to boost your company's productivity.

Why should you boost the productivity of your company?

Many Irish companies have recognised the benefits of having a strategy for improving productivity. Why?

- Increases profitability;
- Lowers operational costs;
- Optimises the use of company resources;
- Increases competitiveness and market share;
- · Provides opportunities for expansion.

Do you have a productivity strategy?

Having a plan and setting aside funds will ensure the most efficient use of resources. A well communicated strategy with clear goals and objectives can show exactly how well your company is performing from year to year.

Did you know that consultation with employees is an important component in delivering a successful productivity strategy?

Do you know your firm's productivity level?

Measuring productivity is a critical part of identifying where improvements can be made and measuring impact, as well as being useful for benchmarking against the performance of your competitors. See how ACE Stationery measured its company productivity in our example overleaf.

Did you know that you can increase productivity by making efficiencies in a number of areas?

- Process flow examine the processes you use and compare them with examples of best practice in the industry;
- Operational flow examine the movement of work through an operation, from the paperwork in administration right through to the finished product in manufacturing;
- Check-sheet use this simple tool to track events in operations and how frequently they occur;
- Run chart record production output, sales performance, quality problems etc, over time;
- Team-working create a successful team-working environment through high levels of employee involvement and engagement.

A manufacturing firm took the following steps to increase efficiency:

- used process performance monitoring charts and employee performance check sheets;
- visited other firms to identify best practice; and,
- organised the workforce into teams. As a result, raw materials reduced by 50%; work-in-progress reduced by 25% and stock turnover increased by over 60%.

For further information, go to Enterprise Ireland at: www.enterprise-ireland.com

Have you considered investing in training and skills?

Upskilling current employees can make a real difference. Providing relevant, role-specific training to your employees will improve company productivity. The quality of the training is important, not the quantity. In addition, investment in management development can yield potentially large productivity and output returns for firms.

A service company that provided training for staff at a cost of €7,800 attributed 25 per cent of subsequent increase in revenue to the resulting performance improvement.

For further information, go to FÁS at: www.fas.ie, or Skillnets at: www.skillnets.ie

Could ICT investment improve efficiency in your business?

Investments could include:

- Hardware such as computers, printers, mobile email;
- Software such as customer relationship management tools, accounting software solutions; web-hosted software; enhanced phone systems including voice mail;
- Broadband and Internet use, for example, setting up a website;
- · Back-up data systems.

An Irish consultancy firm upgraded accounting systems, increased the efficiency of the back-up data system, and introduced the use of mobile email. There were immediate productivity gains and efficiencies, including large time and cost savings.

For further information, go to your local County Enterprise Board, see: www.enterpriseboards.ie

Is your HR Strategy working well?

A high-quality workplace equals a high-productivity business. The key to building a more productive workplace lies with high levels of employee involvement and engagement. By adopting innovative HR management policies and practices, you can make real gains in productivity and performance. Examples of high-performance HR practices include:

- · high levels of information and consultation with employees;
- · team-working;
- training and development;
- · performance management;
- employee retention policies;
- · flexible work arrangements; and
- a commitment to work-life balance issues.

Building a culture of workplace partnership in your organisation will help you get the best from your employees and boost your productivity.

A survey of more than 130 leading Irish companies found that firms with high levels of employee involvement and engagement were 15% more productive than their competitors. In monetary terms, this was found to be equivalent to €12 million per annum in additional sales revenue for the median company in the survey. Employee turnover rates were also 7.7% lower than other firms.

For further information, go to National Centre for Partnership and Performance at: www.ncpp.ie

Have you thought about the positive impact of energy efficiency?

- Investing in energy efficient technology, electrics and buildings will result in cost savings and increased productivity in the long term. Remember to examine the availability of finance for energy efficient investments
- Promoting positive environmental messages on product packaging, such as a reduction in the company's carbon footprint, will increase customer awareness of your company's responsible practices and generate goodwill

A large financial institution that invested €500,000 in improved lighting, heating, ventilation, and overall building energy efficiency recouped four times their investment in energy savings (or €2 million) and also reduced absenteeism by 15%.

For further information, go to Sustainable Energy Ireland at: www.sei.ie

Are there other factors which could improve productivity in your company?

Consider other factors such as investment in equipment, automation or R&D investment. For example, firms engaged in R&D activity and firms that export tend to perform better in terms of productivity.

A firm that increases sales of new innovative products by 1 per cent per employee, can experience an increase in productivity of 0.5 per cent!

For further information, go to Enterprise Ireland at: www.enterprise-ireland.com

See the benefits of having a productivity strategy as you measure productivity over time!

Did you know that your business can take a few simple steps to improve productivity?

Do you know what your company's productivity level is?

Do you know which factors of productivity can be controlled by you? Can you identify the areas in your business where making changes could help boost productivity?

This guide illustrates some basic steps to productivity measurement and improvement.

How to Improve Productivity:

- Assess your firm's productivity performance;
- Make time to plan productivity improvements;
- Develop a productivity strategy for your firm;
- Be sure to inform and consult with your employees;
- Communicate productivity goals across your organisation;
- Benchmark your performance with leading companies in your sector;

- Consider efficiency gains, ICT investment, extra training, energy efficiency and R&D activity;
- Implement innovative HR policies and practices that have been proven to boost productivity and performance;
- Investigate what grants/incentives are available to you;
- Talk to employees about productivity improvements;
- Coordinate plans among departments or functional areas; and,
- Review your productivity strategy at least once a year.









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