

Title	Demonstrate and apply knowledge of finance and costing for print production and analyse growth opportunities		
Level	5	Credits	20

Purpose	<p>This unit standard is intended for people working towards a management role in the print industry.</p> <p>People credited with this unit standard are able to: interpret key financial information and explain responsibilities in the print industry; explain procedures for costing jobs in the print industry; cost a print production job and analyse variances; calculate mark-ups, gross margin, and gross profit for a print production job; prepare a detailed quotation for a print production job; analyse and report on variances between quotation costs and actual costs for a print production job; and demonstrate knowledge of the potential sustainability of growth opportunities in the print industry.</p>
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Classification	Printing > Print Industry Management
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to the:
 - Health and Safety at Work Act 2015;
 - Resource Management Act 1991.

Any new, amended or replacement Acts, regulations, standards, codes of practice, guidelines, or authority requirements or conditions affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

- 2 Definitions

CAPEX refers to capital expenditure.

Gross margin refers to the difference between revenue and cost of goods sold divided by revenue and is expressed as a percentage.

Gross Profit (on a job or business generally) refers to the difference between revenue and cost of goods sold and is expressed in dollar terms.

Mark-up refers to the amount by which the cost of a product is increased in order to derive the selling price.

OPEX refers to operating expenditure.

Print industry refers to all sectors involved in printing and packaging industries including pre-production, production, and post-production activities. The sectors include – graphic pre-press, digital output, sheet-fed, reel-fed, screen, binding and finishing, fibreboard packaging, suppliers to the print industry.

Print industry company is a production company within any of the print industry sectors.

Print production refers to any stage of production in any sector of the print industry.

SWOT refers to strengths, weaknesses, opportunities, and threats.

Workplace procedures refer to organisation policies and procedures that are documented in memo, electronic, or manual format and available in the workplace. They may include but are not limited to – standard operating procedures, site specific procedures, site safety procedures, equipment operating procedures, quality assurance procedures, product quality specifications, manufacturer's requirements, references, approved codes of practice, housekeeping standards, environmental considerations, on-site briefings, supervisor's instructions, and procedures to comply with legislative and local body requirements relevant to the print sector.

3 Assessment information

For the purposes of this unit standard 'company operating figures' may be provided by the print industry company in which the candidate is employed, or an exemplar provided by the training provider.

Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with applicable service information, workplace procedures and legislative requirements.

Outcomes and performance criteria

Outcome 1

Interpret key financial information and explain responsibilities in the print industry.

Performance criteria

1.1 Define and explain key financial terms.

Range	CAPEX, OPEX, fixed costs, variable costs, overheads, running costs, depreciation, total cost of employment, turnover, gross profit, gross margin, mark-up, cost of debtors.
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1.2 Identify key information provided in financial statements and explain the broad implication for business sustainability.

Range	key information includes – operating costs, revenue, income, turnover, profit and loss, cash-flow management; financial statements include – balance sheets and profit and loss statements.
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1.3 Explain responsibilities for costing and finance.

Range	may include but is not limited to – review of productivity benchmarks and change of rates; principles of stock management and waste; updating of raw materials held in stock, price lists for outside services, hourly charge-out rates, overhead recovery rates; review of successful and unsuccessful quotations; changes required as a result of new equipment and/or staff.
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Outcome 2

Explain procedures for costing jobs in the print industry.

Performance criteria

2.1 Explain procedures for calculating costs relating to the components of a print job.

Range	components include – rates charged for individual pieces of equipment, productivity benchmarks, depreciation rates for individual pieces of equipment, handling charges applied to materials and outside services, overheads to be recovered in the rate, the application of profit margins, the valuing of stock.
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Outcome 3

Cost a print production job and analyse variances.

Range	includes but is not limited to – required production processes, rates charged for equipment, productivity benchmarks, depreciation rates for equipment, handling charges, overheads, gross profit, gross margin.
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Performance criteria

3.1 Calculate costs for a print production job.

3.2 Analyse variance between the calculated figures and the current company operating figures.

3.3 Identify changes required as a result of the analysis of the variances.

Outcome 4

Calculate mark-ups, gross margin, and gross profit for a print production job.

Performance criteria

4.1 Obtain the expected return on sales or investment from the company policy.

4.2 Calculate level of mark-up, as a percentage of cost, to achieve the return on sales or investment.

- 4.3 Calculate handling mark-ups on outside services and their expected returns.
- 4.4 Calculate handling mark-ups on materials and their expected returns.
- 4.5 Calculate gross margin and gross profit to ensure that company targets are maintained.

Outcome 5

Prepare a detailed quotation for a print production job.

Performance criteria

- 5.1 Establish costs associated with individual print production jobs.
 - Range includes but is not limited to – materials, substrates, outside services, production hours required to complete each task and/or process, direct labour costs to be applied to the chargeable rate for equipment and/or processes being used, factory overheads to be apportioned to the chargeable hours for the equipment and/or processes being used.
- 5.2 Calculate quantities and costs of materials and substrates to meet the print production job requirements.
- 5.3 Calculate production costs required to complete each production task or process using cost rates.
 - Range evidence for a minimum of three production tasks and/or processes is required.
- 5.4 Calculate costs of outside services as required by the quotation specifications.
- 5.5 Calculate handling charges and/or mark-up on components and include in the quotation.
 - Range components may include but are not limited to – substrates, materials, outside services.
- 5.6 Determine despatch and delivery costs as required by the quotation specifications.
- 5.7 Include gross margin and gross profit in the costing figures set out in the quotation.

Outcome 6

Analyse and report on variances between quotation costs and actual costs for a print production job.

Range report may include – spreadsheet or other appropriate template.

Performance criteria

- 6.1 Compare costs recorded on cost summary sheets for completed work to the quotation, and analyse and report on any variances.

Range may include but is not limited to – time allocations for each process, materials usage and costs, outside services, handling charges, despatch and delivery charges.

Outcome 7

Demonstrate knowledge of the potential sustainability of growth opportunities in the print industry.

Performance criteria

- 7.1 Explain the difference between growth and sustainable growth.

- 7.2 Define the concept of the triple bottom line and explain its significance for sustainable business growth.

Range financial, social, environmental.

- 7.3 Describe the principle of diversification and explain its significance for sustainable business growth.

- 7.4 Explain two strategies for identifying growth opportunities.

Range strategies include but are not limited to – design thinking, SWOT analysis, market research, customer surveys.

- 7.5 Identify one opportunity for growth and explain its potential for sustainability.

Range opportunities may include but are not limited to – new business, increased market share, new products, new technology.

- 7.6 Explain the effect of an anticipated wage increase in terms of the overall impact on the business and charge-out rates.

- 7.7 Identify and estimate costs associated with the introduction of new equipment.

Range may include but is not limited to – new equipment costs, impact of additional/reduced labour to operate equipment, ancillary plant that will be required, impact on current space, impact on cashflow for creditors and debtors.

- 7.8 Describe and compare financing options for the acquisition of new equipment in terms of their implications for the business.

Range finance options include but are not limited to – leasing, bank loan, use of cash reserves;
comparison includes both short and long-term financial implications.

Replacement information	This unit standard replaced unit standard 16764, unit standard 16765, and unit standard 16768.
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Planned review date	31 December 2027
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	22 August 2008	31 December 2020
Revision	2	12 December 2008	31 December 2022
Rollover and Revision	3	31 May 2018	31 December 2025
Review	4	23 July 2020	31 December 2027
Review	5	30 March 2023	N/A
Revision	6	27 February 2025	N/A

Consent and Moderation Requirements (CMR) reference	0013
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Hanga-Aro-Rau Manufacturing, Engineering and Logistics Workforce Development Council qualifications@hangaarorau.nz if you wish to suggest changes to the content of this assessment standard.