

A Need-First Guideline for New Startups: Linking the 5M Framework, Market Need Analysis and Financial Evaluation

Srilatha Kalvacherla

Planned entrepreneur, Punarnavi, Mumbai, India

Abstract

A startup that begins with an idea, rather than a market need, tends to struggle however good its product. This paper presents a practical, step-by-step guideline for new entrepreneurs that starts from the need and works towards sustainable returns. The guideline combines five elements: (i) the 5M framework of business inputs (Man, Machine, Material, Method, Money); (ii) analysis of present and future market need and its matching with the organisation's own resources; (iii) building a distinctive sale point measured on Productivity, Quality, Cost, Delivery and Safety (PQCDS); (iv) financial evaluation through investment and working capital, project life-cycle analysis, ROI, NPV and IRR; and (v) recognition of both tangible and intangible returns. Agriculture is used as a short case to show how trend-reading changes a trade, and four evergreen markets (power, food and FMCG, real estate, medical) are discussed as options for stability. A one-page guideline matrix and a nine-step checklist consolidate the framework for direct use. The paper is conceptual and practitioner-oriented; it does not report empirical testing, and suggestions for validation are given.

Keywords: startup guideline; market need analysis; 5M framework; PQCDS; financial evaluation; NPV; IRR; evergreen markets; entrepreneurship

1. Introduction

A business or trade needs a range of inputs: raw material, a production or process set-up, people, consumables and other items that go into its final product. These inputs can be grouped under the 5M framework described in Section 3. Inputs alone, however, do not make a business. A business is ultimately defined by its compatibility with market needs, and the first task of a startup is therefore to identify the need and test whether the proposed business model can serve at least some part of it.

Many new ventures instead begin with a product or technology and look for customers afterwards. This product-first sequence is a recurring explanation for early failure, and the entrepreneurship literature has repeatedly argued for testing customer need before committing resources (Blank, 2013; Ries, 2011). This paper offers a compact, practical guideline that keeps the need at the start of the sequence and carries it through resource matching, positioning, financial evaluation and the expectation of returns.

The contribution of the paper is a single ordered path that a first-time entrepreneur can follow in any sector, together with a matrix (Figure 1) and a checklist (Table 5) that turn the path into working tools. The remainder of the paper is organised as follows. Section 2 gives the conceptual background. Sections 3 to 9 present the guideline. Section 10 discusses implications and limitations, and Section 11 concludes.

2. Conceptual Background

Three established ideas underlie the guideline. First, the resource-based view holds that a firm's sustained advantage rests on the resources it controls and how it uses them (Barney, 1991); this supports the step of matching identified needs against the organisation's own 5M resources. Second, the business-model literature stresses that a model describes how an organisation creates, delivers and captures value, and that the model must be designed around a customer proposition (Osterwalder & Pigneur, 2010; Teece, 2010). Third, the classic argument in "Marketing Myopia" is that firms fail when they define themselves by their product rather than by the customer need they serve (Levitt, 1960). The present guideline translates these ideas into a sequence of questions and outputs that a new entrepreneur can answer without specialist training.

The financial part of the guideline relies on standard capital-budgeting measures, namely net present value, internal rate of return and return on investment, as set out in corporate finance texts (Brealey, Myers & Allen, 2020). The agricultural case in Section 6 draws on the agrivoltaic concept of combining solar generation and crop production on the same land (Dupraz et al., 2011).

3. The 5M Framework of Business Inputs

All inputs of a business can be divided into five categories. A startup should list and plan each of them before set-up begins, whatever the sector, whether manufacturing, agriculture, services or government-linked work.

Table 1. The 5M framework of business inputs

Input	What the startup must plan
Man	People, skills and the organisation structure needed to run the work
Material	Raw material and consumables for the final product
Method	Production or process method, and how the product reaches the customer
Money	Investment capital, running capital and a plan for reinvestment
Machine	Equipment and technology for production and delivery

4. Identifying and Analysing the Need

4.1 Supply as per market need

The business should supply what the market needs, and not the other way round. The first step is to identify the need. Different levels of an organisation or market may see different needs, so the person planning the business should gather views from more than one level.

4.2 Analysis of need

The needs of society or the market vary. They depend on aspects such as:

- social and financial status;
- education; and
- security and health.

The planner must understand both the present and the future needs of the people and the market, that is, short-term and long-term needs. This tells the startup whether it can withstand and grow within the planned

business model. Technology change is a clear example: mobile phones, the internet, artificial intelligence and changing food habits have each created or reshaped whole markets.

4.3 Which needs can the startup fulfil?

Not every need can be met. The startup should match each identified need against the resources of its own organisation, using the 5M inputs of Section 3, and choose the needs it can serve well.

5. Building the Sale Point

To sustain and grow while matching market needs with the resources available, the business must maintain uniqueness and PQCDS in the market. PQCDS stands for Productivity, Quality, Cost, Delivery and Safety. Sales plays a major role along with marketing. A startup should therefore ask:

- What is unique about what we offer?
- How do we perform on PQCDS compared with others in the market?
- How will marketing and sales reach the customers we have identified?

6. Reading Trends: A Case from Agriculture

A business must know the changes in trends and the potential sources from which to capture the need. Agriculture shows how a trend can change a whole trade. Conventional and advanced agriculture differ as shown in Table 2.

Table 2. Conventional versus advanced agriculture

Conventional agriculture	Advanced agriculture
Regular crops	Multi-productive planning and strategy (agrivoltaic, shaded crops, etc.)
Harvest	Machine-based cultivation methods
Cultivation methods	Process involved, with attention to product delivery

The lesson for any startup is that the same field can offer very different opportunities depending on how well the trend is understood and how far the method is modernised.

7. Policy and Planning

Planning should proceed in a clear order: understand the market, set up production, arrange the resources, and fix the method. The plan should address the possible needs of people and the market as per the organisation's resources, with PQCDS and uniqueness built in from the start. Figure 1 shows how the five inputs are applied at each stage of the business journey, from need analysis to financial evaluation.

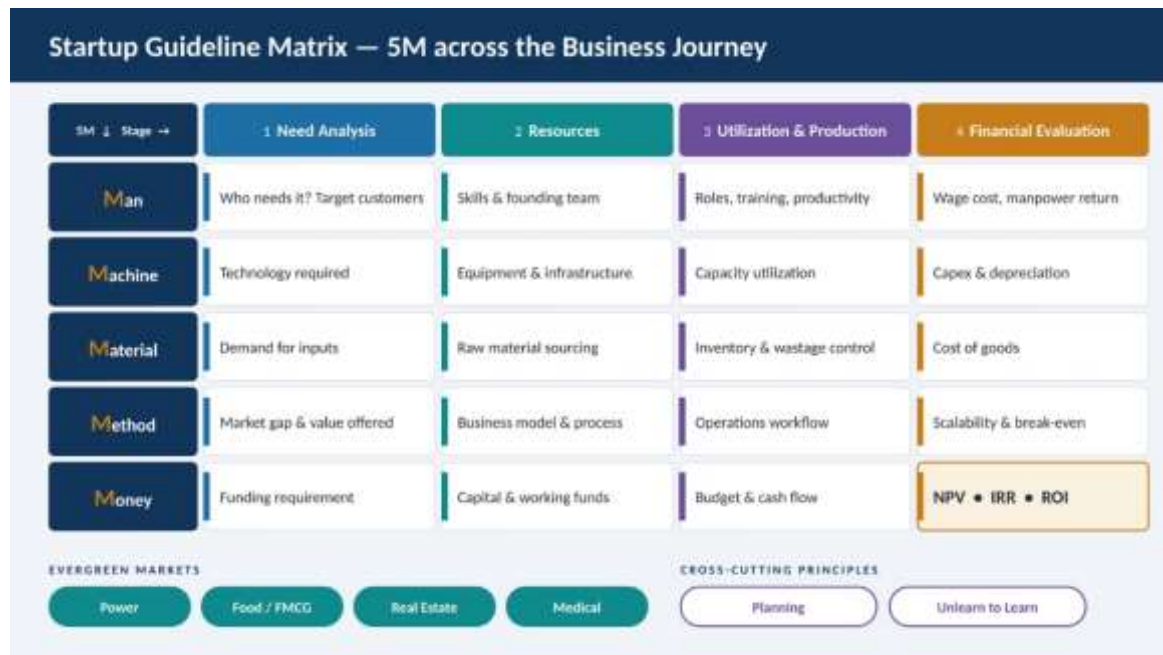


Figure 1. Startup guideline matrix: the 5M across the business journey

8. Financial Evaluation

Financial evaluation is among the most important criteria for building a successful business model. It should cover the elements in Table 3.

Table 3. Elements of financial evaluation

Element	Purpose
Investment capital (invested)	Find the capital needed to set up the business
Running (working) capital	Plan the money needed for day-to-day operation
Return cash flow or yield	Estimate what the business will return over time
Project life-cycle analysis	Look at the whole life of the project, not only the first year
ROI (return on investment)	Compare the gain with the amount invested
NPV (net present value)	Value future cash flows in today's terms, after discounting
IRR (internal rate of return)	The discount rate at which the project's NPV becomes zero
Reinvestment plan	Plan how part of the returns will be put back into the business

The three summary measures can be written in their standard form as

$$ROI = (\text{Net gain} \div \text{Amount invested}) \times 100\%$$

$$NPV = \sum [C_t \div (1 + r)^t] - C_0 \quad (t = 1 \dots n)$$

IRR is the value of r for which $NPV = 0$

where C_0 is the initial investment, C_t is the net cash flow in year t , r is the discount rate and n is the project life in years. A project is generally acceptable when NPV is positive and IRR exceeds the entrepreneur's

required rate of return (Brealey, Myers & Allen, 2020). Together these form the investment plan of earnings: how capital goes in, how returns come out over the project life, and how part of them is reinvested for growth.

9. Understanding Returns

Returns are not always in a tangible form. They may also be intangible. Intangible gains still help the business grow and reach long-term success, so they should be recognised and, where possible, tracked alongside the financial figures (Table 4).

Table 4. Tangible and intangible returns

Tangible returns	Intangible returns
Money, profit, cash flow, assets	Reputation, customer trust, skills and experience, market position

Items are illustrative and can be adapted to the business.

9.1 Evergreen markets

Some sectors have steady demand across time and economic conditions. A startup that wants stability can consider the following evergreen markets:

1. Power sector
2. Food and FMCG (fast-moving consumer goods)
3. Real estate
4. Medical

Even in these sectors the earlier steps still apply: the need must be analysed, matched to resources, and supported by a sound financial plan.

9.2 Mindset: unlearn to learn, and patience

- **Unlearn to learn.** To meet new trends, old or conventional methods and programmes may need to be unlearned so the business can catch the trending market scenario.
- **Patience.** Returns, whether tangible or intangible, take time. The founder should plan for the full project life cycle and not judge the business only by early results.

10. Application, Implications and Limitations

10.1 Startup checklist

Table 5 converts the guideline into nine questions, each with a defined output, so that an entrepreneur can work through the sequence and keep a written record of decisions.

Table 5. Startup checklist

Step	Question to answer	Output
1	What need exists in the market, now and in future?	List of identified needs
2	How does the need vary with social, financial, education, security and health status?	Need analysis
3	Which needs can our 5M resources fulfil?	Chosen need and business model

Step	Question to answer	Output
4	What is our uniqueness and PQCDs position?	Sale point and marketing plan
5	What trends could change this market?	Trend review
6	How much investment and running capital do we need?	Capital plan
7	What do ROI, NPV and IRR show over the project life?	Financial evaluation
8	What tangible and intangible returns do we expect, and how will we reinvest?	Returns and reinvestment plan
9	What must we unlearn, and are we prepared to wait for returns?	Review and learning plan

10.2 Implications

For entrepreneurs, the guideline offers an ordered path that prevents the common error of building before the need is understood. For incubators, mentors and training programmes, the matrix and checklist can serve as a common template for reviewing early-stage proposals. For public-sector and institutional initiatives that follow a business-like model, the same sequence can be used to test whether a proposed activity matches a real need and the resources available.

10.3 Limitations and future work

The paper is conceptual and practitioner-oriented. The guideline has not been tested empirically, and the evergreen-market list reflects the author's judgement rather than a statistical ranking of sectors. The agricultural case is illustrative and does not include quantitative data. Future work could validate the checklist through case studies or a survey of early-stage ventures, compare outcomes of ventures that follow the need-first sequence with those that do not, and extend the guideline with sector-specific variants and risk analysis.

11. Conclusion

A successful startup starts with the need, not with the product. It plans the 5M inputs, serves the needs it can truly fulfil, stands out through uniqueness and PQCDs, and checks its finances through ROI, NPV and IRR over the whole project life. It values intangible as well as tangible returns, keeps learning and unlearning as trends change, and has the patience to let returns build. Following this order gives a new entrepreneur a clear and practical path from idea to sustainable business.

References

1. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120.
2. Blank, S. (2013). Why the lean start-up changes everything. *Harvard Business Review*, 91(5), 63–72.
3. Brealey, R. A., Myers, S. C., & Allen, F. (2020). *Principles of Corporate Finance* (13th ed.). McGraw-Hill Education.
4. Dupraz, C., Marrou, H., Talbot, G., Dufour, L., Nogier, A., & Ferard, Y. (2011). Combining solar pho-

to voltaic panels and food crops for optimising land use: Towards new agrivoltaic schemes. *Renewable Energy*, 36(10), 2725–2732.

5. Levitt, T. (1960). Marketing myopia. *Harvard Business Review*, 38(4), 45–56.
6. Osterwalder, A., & Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. John Wiley & Sons.
7. Ries, E. (2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Business.
8. Teece, D. J. (2010). Business models, business strategy and innovation. *Long Range Planning*, 43(2–3), 172–194.