ROLE OF MANUFACTURING COMPETENCY IN STRATEGIC SUCCESS OF A COMMERCIAL VEHICLE MANUFACTURING UNIT: A CASE STUDY

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Abstract

The identification of these key manufacturing challenges and their corresponding technologies, systems and paradigms is aimed at providing a new manufacturing perspective to both academics and industrialists.The challenges and developmental areas proposed provide the basis for a new and advanced manufacturing strategy to be developed. This paper presents a detailed case study in a commercial vehicle manufacturing unit.

Keywords: Manufacturing Competency, Strategic Success, Case Study, Commercial Vehicle Manufacturing Unit

INTRODUCTION

Competencies are important both for the Organization and for staff. Competencies are forward-looking. They describe the skills and attributes staff and managers will need in order to build a new organizational culture and meet future challenges. They help organizations clarify expectations, define future development needs, and do more focused recruitment and development planning. Competencies provide a sound basis for consistent and objective performance standards by creating shared language about what is needed and expected in an Organization.

There is significant and positive relationship between manufacturing strategy and export performance of manufacturing SMEs. The importance of adopting the manufacturing strategy among the owner/managers of manufacturing SMEs for their success and these firms would gain in terms of competitive advantage over their rivals and reap higher export performance. They could also anticipate future threats and seek out opportunities for further expansions in the international markets (Singh and Mahmood, 2014).

The auto component sector is flexible in developingstrategies and those strategies relating to cost, quality; investment and competency development aresignificantly correlated with competitiveness. Competitiveness ofIndian auto component sector, within a globalised economy with its attendant pressures andconstraints is analyzed. Organizations should make the necessary investment to develop newcompetencies, and should address cost reduction and quality improvement (Singh *et al.*, 2007).

The effect of a modern, horizontal organizational structure on a company's performance and growth on the market facilitates the achievement of higher value added as well as has a direct impact of managerial competencies on a company's performance (Verle*et al.*, 2014).

CASE STUDY IN A COMMERCIAL VEHICLE MANUFACTURING UNIT

This project in its concept, aims at breaking new ground not only in terms of product and production technology, but also in building a new culture and value system in the organization, which enables it to move forward with confidence into the era of competitive markets. This guiding philosophy is dictating every facet of project implementation both in physical facilities and the human side.

TECHNOLOGICAL INTIATIVES

The Commercial manufacturing unit, having recognised the growth potential in the Indian market, is putting its shoulder to the wheel at the company. It now has its own director R&D, who heads the R&D wing and is also a whole-time director on the board. The division is currently studying the Indian market and taking a call on the products it can customise for India.

Today, this unit is diligently working on innovative clean diesel technologies and low pollution alternate fuel vehicles. Because they combine excellent fuel efficiency with relatively low carbon dioxide (CO_2) emissions, diesel engines are currently viewed as having immense potential to help prevent global warming and contribute to environmental preservation.

People here are attempting to further improve the advantages of diesel engines, which include high performance and durability in addition to a high thermal efficiency. At the same time, the company is pouring its energies into clean diesel engine R&D with the aim of reducing emissions of particulate matter (PM) and nitrogen oxides (NOx).

Clean Diesel Technology

Diesel engines offer a number of advantages: superior fuel economy, longer cruising range and low CO_2 emissions. This industry is focusing on enhancing the advantages of diesel and reducing emissions even further with its original expertise as the company strives to produce the best diesels in the world.

Low Pollution Alternative Fuel Vehicles

This manufacturing unit is devoting itself in the development of hybrid-electric trucks utilizing reliable diesel engines and vehicles powered by alternative energy resources such as DME dimethyl ether, CNG compressed natural gas, and LPG liquefied petroleum gas. Low pollution alternative fuel vehicles not only achieve cleaner emissions, but contribute to the more effective use of limited resources.

Engine localisation to trigger growth

Meanwhile, the 3.5-litre engine that is in use since 1984 has undergone several up gradations at the in-house R&D centre to meet BS I-IV emission norms with the existing lot of LCVs powered by BS-III and BS-IV engines. Localised products have enabled the company to notch a 13 percent market share in the 100,000-unit LCV market it is present in. Several variants of the 3.5-

litre engine have also been developed over the years and the company is now further strengthening its R&D capability for which an investment of Rs 200 crore is envisaged.

MANAGEMENT IITIATIVES

Though initially about 100 units of chassis were imported, they are now being developed in-house leveraging the Japanese design. But production of the old models of buses built by external body builders also continues.

This industry is also looking at developing low-floor city buses for which relevant chassis are to be designed. At present, their portfolio spans high-floor and semi-low floor buses. Also, it is not present in the bigger city buses like the Marcopolo buses that ply on Indian roads.

Among the new products in the M&HCV segment that the company has zeroed down is a 41-seater, 11-metre front-engine bus (IS12B) that will be positioned between the two buses already launched. Powered by a BS-III 5.2-litre, 4-cylinder engine developing 173hp, it will be equipped with airbags, air suspension and ABS. The CV maker has analysed the market dynamics and expects that this model, which will be launched early 2013-14, has a large market potential.

Human Resources

The Company has always strived to attract the best talent, provide invigorative work environment, retain achievers and out-performers and inculcate in the employees loyalty for the organization. Raising employees' involvement in the decision making process and grooming them for leadership positions has been an ongoing process.

Business Risks and Concerns

Demand for commercial vehicles is dependent upon overall economic activity, infrastructure development and smooth availability of retail finance for trade transport. India is heavily reliant on imported oil, thus global oil prices and exchange rate volatility have a bearing on transport sector. Performance of Railways and movement in freight rates are also key factors that have a bearing on demand for cargo carriers. Higher emission standards under Bharat Stage IV norms have become applicable in 20 cities, some more likely to be added during this year and its applicability throughout India is under discussion in the Government.Technical alliance, up gradation of R&D centre, and establishment of new manufacturing facilities that include bus body fabrication, up-gradation of existing facilities and cost cutting are some of the major initiatives and concrete steps taken by the Company to minimize its vulnerability to business risks.

Business Risk Evaluation and Management is an outgoing process within the Company. For each function, the impact and probability of various risks are made and necessary control measures are identified to mitigate these risks, thereby reducing the impact and probability of the risk.

QUALITY

Winning trust from customers

It aims to win trust from the customers by providing meaningful product and services to the society and thus contribute to the creation of a prosperous society

Making contribution to preserving environment

This company actively works on environmental protection not only through their business activities but also as corporate citizen residing on earth by involving the company with social and regional environmental conservation activities.

Contributing to society

They proactively undertakes social contribution activities as a good corporate citizen.

Ensuring harmony with international and regional communities

People here respects the cultures and customs of nations and regions involved, and contribute to their development through their business activities.

EFFECT OF COMPETENCIES ON STRATEGIC SUCCESS

The growth strategy going forward is therefore to kick off operations with imported engines and transmissions and slowly localize them over a period of time. But all this will come at a cost and sizeable investment. The company is mulling localizing the 4-litre engine for trucks and buses in the long-term as higher horsepower engines come at an increased cost.

Net revenue typically refers to a company's revenue net of discounts and returns. Net revenue is generally intended to be a measure of the "real top line" rather than the bottom line. Following fig. 1 shows the last 5 years variation in net revenue.

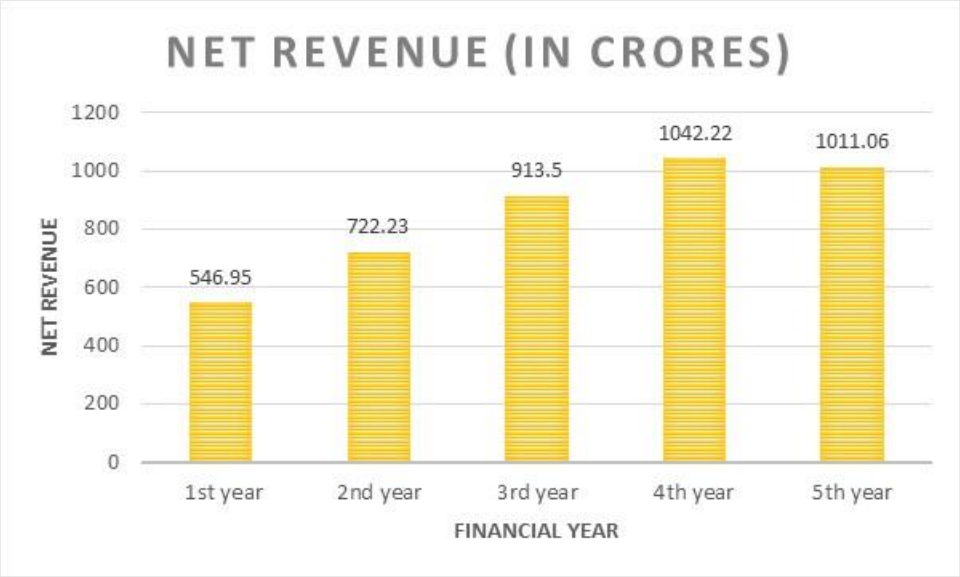

Fig. 1 Net Revenue

Fig. 2 Operating Profit

Above Fig. 2 shows the graph for operating profit. The profit earned from a firm's normal core business operations. This value does not include any profit earned from the firm's investments (such as earnings from firms in which the company has partial interest) and the effects of interest and taxes.

Below fig. 3 shows the line graph for Profit after Tax. The profit after tax is often a better assessment of what a business is really earning and hence can use in its operations than its total revenues.

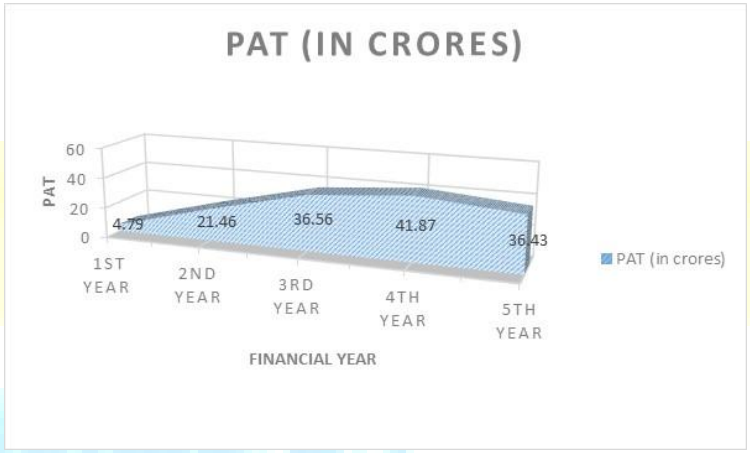

Fig. 3 Profit After Tax

General Revenues are funds received at the state and local levels of government that may be utilized for any purposes. Fig. 4 shows the amount transferred to general revenue for last 5 years.

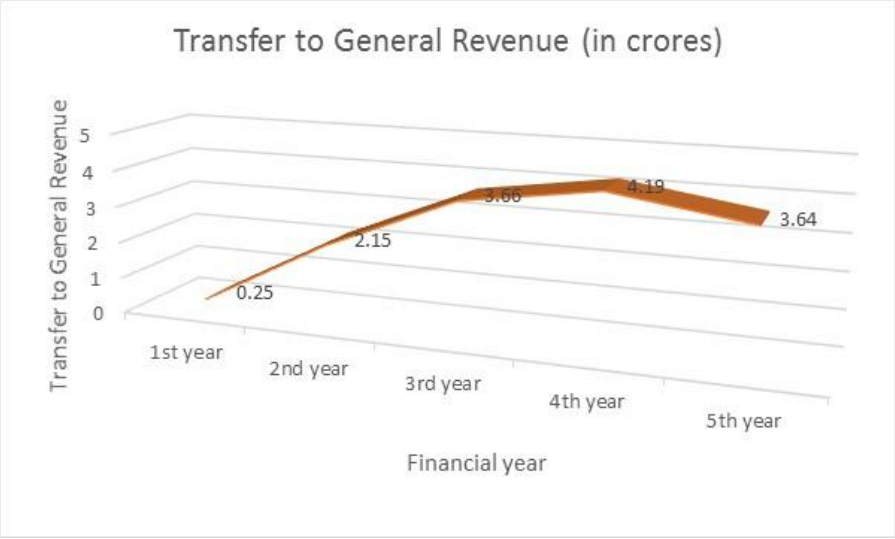

Fig. 4 Transfer to General Revenue

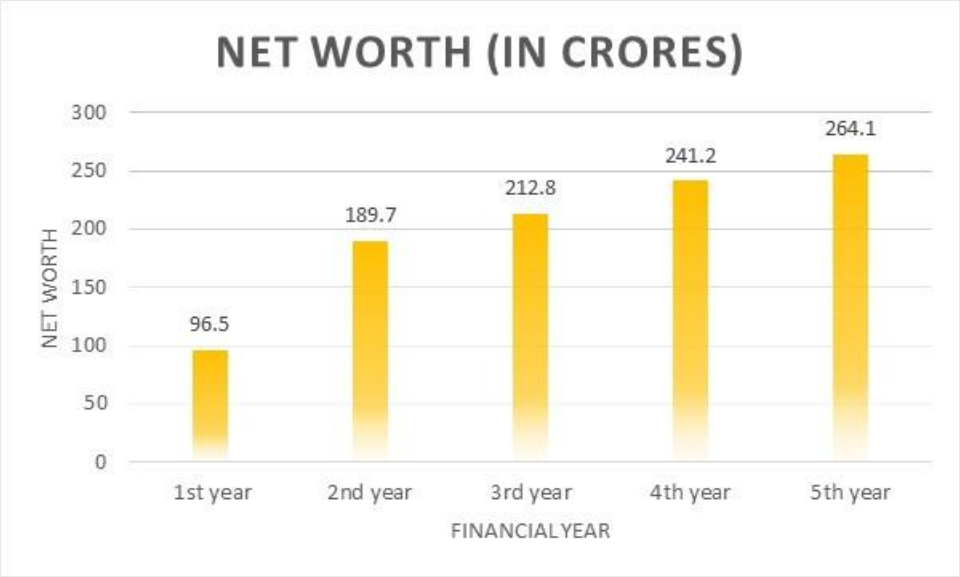

Fig. 5 Net Worth

Net Worth is the amount by which assets exceed liabilities. Net worth is a concept applicable to individuals and businesses as a key measure of how much an entity is worth. A consistent increase in net worth indicates good financial health; conversely, net worth may be depleted by annual operating losses or a substantial decrease in asset values relative to liabilities. Above graph in fig. 5 shows the variation for net worth for last 5 years which shows a continuous increase.

Capital expenditures (CAPEX) are expenditures creating future benefits. A capital expenditure is incurred when a business spends money either to buy fixed assets or to add to the value of an existing fixed asset with a useful life extending beyond the taxable year. Before a business begins its operations, it purchases assets, which constitute the capital expenditures. Fig. 6 shows the variation and comparison of capital and recurring expenditure for last 5 years.

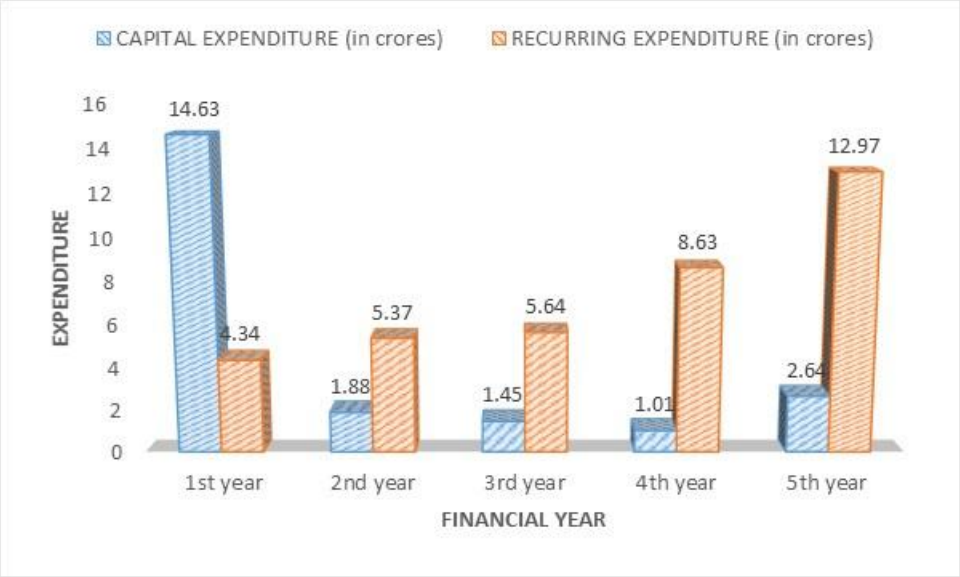

Fig. 6 Expenditure (Capital and Recurring)

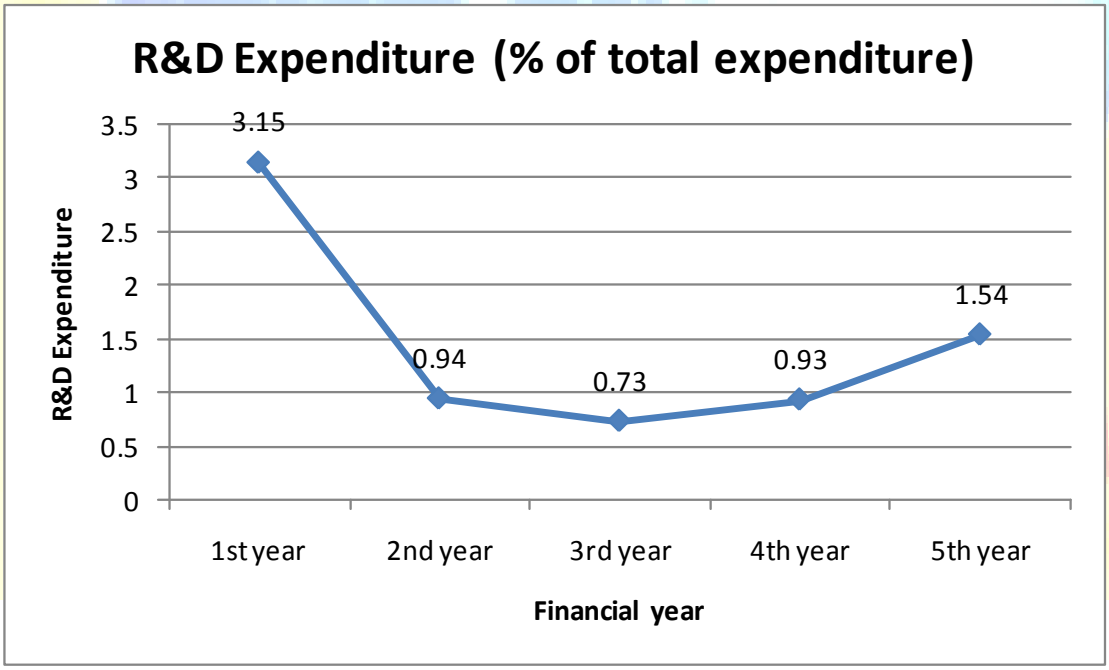

Fig. 7 R& D Expenditure

Expenditures for research and development are current and capital expenditures (both public and private) on creative work undertaken systematically to increase knowledge, including knowledge

of humanity, culture, and society, and the use of knowledge for new applications. R&D covers basic research, applied research, and experimental development. Fig. 7 shows the graph for variation of R&D expenditure for last 5 years.

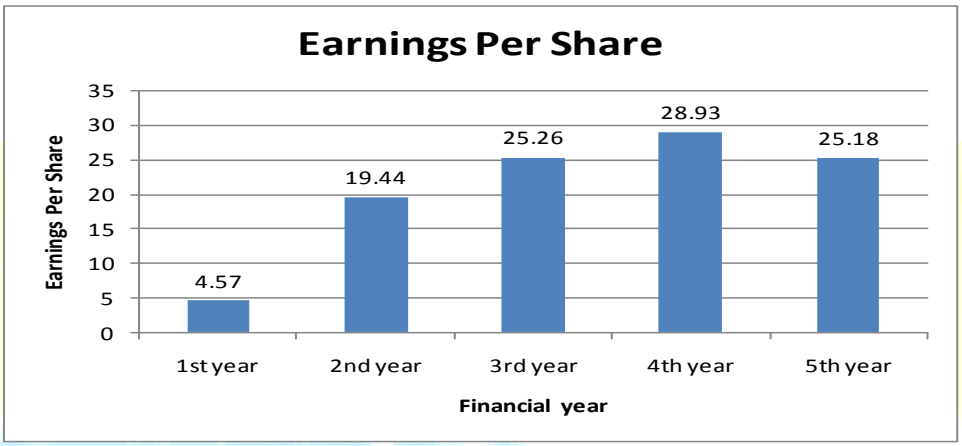

Fig. 8 EPS

Earnings per share serves as an indicator of a company's profitability. The portion of a company's profit allocated to each outstanding share of common stock. The portion of a company's profit allocated to each outstanding share of common stock. Earnings per share serves as an indicator of a company's profitability. Fig. 8 shows the Earnings per share variation for past years.

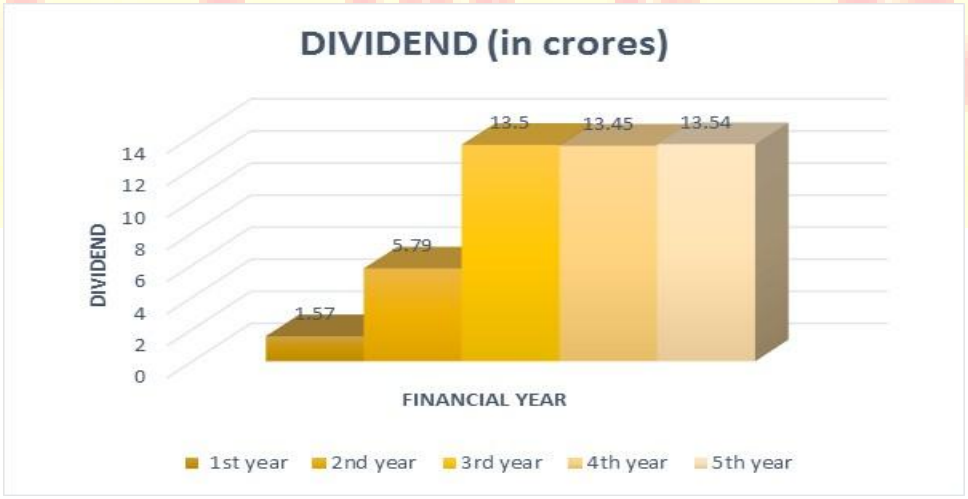

Fig. 9 Dividend

If company has a certain amount of cash they wish to return to shareholders, the two ways they can do it are through dividends and share repurchases. Share repurchases are great when the share price is undervalued, and not-so-great when the share price is overvalued. Fig. 9 shows the proposed dividend for last 5 years.

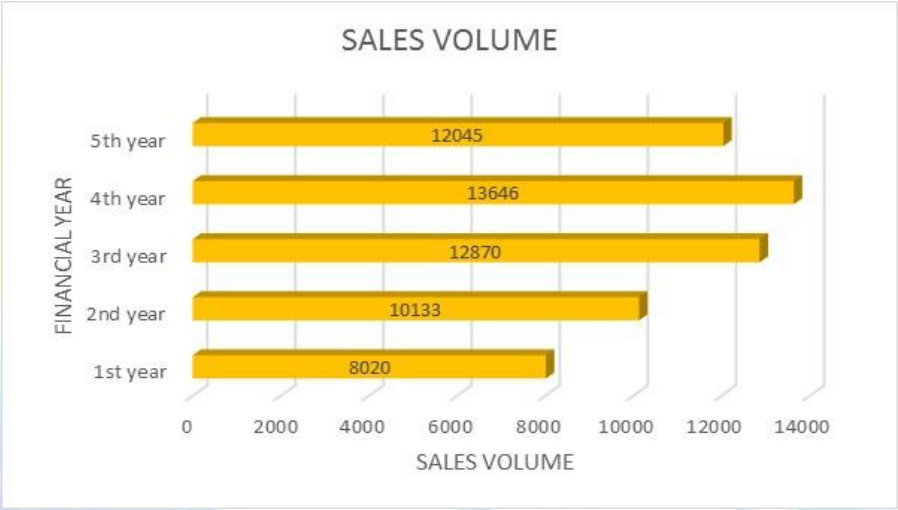

Fig. 10 Sales Volume

Above Fig. 10 provides the data for sales for last 5 years.

CONCLUSION

From above case study of it has been seen that the companies havekept on growing from the past years it. This is due to the companies introducing new strategies and technologies in their products. It is very difficult to with stand in the competitive world to withstand in the market every company have to use competency in their products in the present times time.

The goal is to build advanced technologies with world-class performance in each of these three core areas. Their unwavering objective is to supply the global market with products that combine safety and economy with a reduced environmental impact.

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