# Key Financial Indicators and the Drivers for Success Best Practices

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In this study a team of subject matter experts (SME's) and a representative sampling of top performing general contractors and subcontractors developed a detailed list of key financial indicators and their driver(s). The findings were that top performers utilize Key Financial Indicators to establish company focus and objectives, align organizational action, benchmark results, and reward performance. Key financial indicators measuring profitability, cash flow, firm leverage and liquidity are regularly assessed and the results communicated to the organization. Performance data is analyzed to guide organizational action and forecast outcomes. Top performers recognize that profitability is the hallmark of a successful contractor and they continuously drive the organization to improve margins and profitability. They maximize operational performance and the indirect income sources associated with performance of the work. The best performers strive to balance the risk-reward relationship to ensure an appropriate return on the equity invested in the firm. The best in class realize cash is king and that effective cash management is the lifeblood of the firm. They aggressively manage cash-flow through effective administration of the billing process and accounts receivable and sensible management of their creditors. Top performers effectively leverage their equity to gain access to the necessary credit to finance operations, but they do not abuse their creditors nor jeopardize their liquidity. The best performers are voracious consumers of performance data to forecast outcomes and gain insight to guide current activities and the future direction of the firm.

**Key Words:** financial indicators, financial performance, performance drivers

## INTRODUCTION

Managing a successful construction company is a risky and challenging proposition. Contractors operate in a complex and ever-changing marketplace where competition is keen and margins are slim. Production schedules are continually being compressed while owner expectations escalate. Disputes are commonplace, material and labor costs fluctuate, and governmental regulations are constantly on the rise. The team assembled for design and construction is an ad hoc group comprised of individuals and organizations with diverse educational backgrounds and experience that often have differing project objectives. Most projects have a majority of the construction activities exposed to the elements during production and/or performed in unconditioned space – variables that can have significant impact on labor productivity, installation quality, and schedule performance (Bausman, 2001). Within the context of these challenging industry and project forces, contractors are expected to competitively predict construction cost and time of completion and then contractually guarantee performance.

It is little wonder that in this operating environment financial failure is quite commonplace. During the 1990's – a decade of relative prosperity in the construction industry – an average of 10,000 contractors/yr experienced financial failure. Thirteen percent (13%) of all failures were construction companies (Roper and McLin, 2005) and failure was not limited to small firms. For large and small firms alike 'it's a challenge to survive, let alone thrive'.

Effective financial management is essential for success of the organization. Financial data must provide adequate insight to learn from past performance, facilitate an accurate picture of current conditions, and provide a proper perspective to guide action and future performance for each project and the firm (Henderson, 2004; Bausman, 2003). But what are the key financial indicators for a construction organization? Those indicators that provide company focus, align organizational action at all levels, and also serve as effective measures of organizational performance. Many of the available financial measurements provide insight into a firm's performance, but only a few are key indicators of a firm's performance. With a construction operation, there is typically no shortage of financial data – in fact many firms suffer from too much data or rely on the wrong measurements. It is easy to get lost in the minutia of financial reporting and lose sight, or never attain focus, on those key indicators that drive and effectively measure project and company performance.

Identification of these key indicators is only the first step. They must be evaluated against the firm's expectations: its tactical objectives, annual business plan, and strategic goals. Performance should also be benchmarked against the industry – not just the average performers – but the Best of Class (RMA, 2006). Management must also understand the variables and operational forces that drive these indicators.

## METHODOLOGY

The purpose of this study was to identify the key financial indicators for construction firms and the variables that drive these indicators. To accomplish that objective the first step was to assemble a team of subject matter experts (SME's). SME team members included financial advisers and construction accountants who are members of ProfitCrew™, an association of accountants and consultants in North America dedicated to helping contractors build profitable businesses. Due to their decades of experience serving construction clients, members of this focus group truly understand the economics of the construction business and the dynamics of the construction market. In addition, SME's included academic scholars with knowledge of the subject matter and direct access to top performers in the industry. This team of experts developed a detailed list of key financial indicators and identified the driver(s) for each indicator. The team then selected a representative sampling of top performing general contractors and subcontractors whose input was sought for validation of the assembled list of key financial indicators and their drivers. To enhance the 'quality' of the findings input was solicited from an 'elite' member of the organization – the president/CEO, financial officer, and/or senior manager (Gummesson, 2000).

To facilitate participation, and enhance the validity of respondent input, interview participants were assured of confidentiality beginning with the initial solicitation (Cooper and Schindler, 1998). To maintain the required level of trust and protect the confidentiality of the respondents, their input has been 'reduced' and summarized to disguise the source and their precise commentary has not been quoted in the text of the findings.

The research strategy employed could be classified as 'accurate description' (Strauss and Corbin, 1990) or 'descriptive' qualitative research (Cooper and Schindler, 1998). The object of the study was to develop a descriptive summary of the categories and corresponding 'themes or patterns' of all the study participants and SME's. The interviews were structured to facilitate 'purposeful conversation' (Marshall and Rossman, 1989). The participants were provided the listing of KFI's developed by the team of SME's, but were given the latitude to edit this list they as deemed appropriate. The participants were assured that the investigative team '*wanted to know what they considered to be the KEY financial performance indicators and their drivers.'*

**FINDINGS**

The key financial indicators that emerged from this study fall into five primary categories: Profitability, Cash Flow, Leverage, Liquidity, and Forecasting. The following narrative presents the detailed findings for the key financial indicators and their driver(s) in each category.

**Profitability**

The two key financial indicators for the category of profitability were Return on Equity (ROE) and the percentage of profit based upon revenue – both % Gross profit and % Net profit. ROE is primarily used as a KFI for overall company performance. However, the percentage of profitability serves as a KFI for the project, business unit, profit center, and the company.

*ROE*: Return on Equity is a relationship between earnings and the amount of equity invested in the firm. It is the single most relevant measure of the overall financial performance of the organization. It affords ownership a comprehensive, risk-adjusted assessment which permits year-to-year comparisons and the insight needed for future investment decisions.

There are a number of variables driving ROE, including firm profitability and the relative amount of equity placed at risk. Maintaining an appropriate capitalization relative to the firm's revenue and associated risk also influences the indicator. Over-capitalization results in excess investment or equity in the firm which drives down ROE. Conversely, under-capitalization may yield high ROE in the short term, but it leaves the firm vulnerable to market gyrations and performance shortfalls.

However, few variables are more influential on ROE than the firm's profitability and underlying operational strategy. Studies have shown that firms identifying and communicating strategic intent have superior ROE performance. The best performers not only develop, but execute organizational strategy. They link tactical and functional action to the firm's strategy and align organizational structure with strategic objectives. The best in class tend to pursue a generic strategy of differentiation, compete based upon value, continuously focus on operational excellence, and are highly committed to employee fulfillment and customer satisfaction. In these organizations leadership takes a primary role in the development of strategic objectives and management develops a keen awareness of the operating environment and continually seeks feedback on performance. Those organizations selectively identify, evaluate, and pursue customers of strategic importance to the firm. This alignment of strategic intent and tactical action enables them to capitalize on their strengths and proactively position organizational resources for superior performance.

*Net and Gross Profit*: Profitability is the hallmark of a successful contractor. Without it, individual employee and organizational growth is stifled, a firm's options are severely limited, and a persistent lack of profitability threatens the very existence of the organization.

For the top performers there are two generic sources of profitability: operational and non-operational profit. Operational profit is that derived directly from the execution of the firm's construction activities. It is a measure of the profitability of the firm's construction operations – what the firm is making as a contractor. Operational profitability is an indicator of performance on the construction risks being assumed by the firm. As a result, this measurement is of great import to ownership, sureties, and the firm's other financial partners. Non-operational profit is profit derived indirectly and/or independently from construction operations. It is a measure of management's ability to identify supplemental profit opportunities associated with its primary construction business and/or those offered through independent investment opportunities.

Regardless of the source, there are essentially two primary measurements of profitability – gross profit and net profit. Gross profit is a key financial indicator (KFI) that is often used to measure project performance. It is generally expressed as both an absolute number and a percentage of direct cost. Net profit is calculated by subtracting indirect costs, or overhead, from gross profit. It is often a KFI for strategic business units or profit centers and to assess the overall performance of the firm. Net profit is typically expressed as an absolute number and as a percentage of revenue.

Top performers excel at maximizing both gross and net operating profit. They also maximize the non-operational profitability indirectly associated with the firm's operations. The best monitor performance on a regular basis – often daily. Successful firms measure performance for each project, sector, team or business unit, service group, and the overall company. They have well-defined processes to collect, organize, and format current and relevant data for each management team. The best track profitability to accurately assess performance, enhance individual and business unit accountability, and provide guidance for corrective action. Profitability is used as a KFI for every individual, business unit, and the overall organization. Financial rewards for project, business unit, and service group managers are based upon performance. The culture of the firm reinforces individual and team accountability and promotes financial rewards based upon performance. Bonuses are based on performance - no profit, no bonus. There are no perfect attendance awards.

Top performers recognize that best of class performance is predicated on operational excellence as well as client and project selection. As a result, they strive to enhance profitability by pursuing projects and clients that capitalize on the firm's operational strengths and strategic objectives. This entails: a) targeting niches that optimize return, b) pursuing clients with an appropriate work program and reasonable contracting methods, and c) targeting individual projects that the firm has the experience and resource capability to successfully execute. They play to their existing strengths and capabilities while concurrently developing organizational resources and expertise to capitalize on emerging opportunities.

Successful firms also recognize the indirect profit opportunities that are associated with effectively managing their construction operations and servicing their customer needs. These firms effectively maximize operational cash flow and then judiciously invest the excess funds to maximize return. The best performers negotiate contract fees, shared savings, and bonuses to enhance profitability. They structure project reimbursements to recoup indirect project cost. Many develop insurance programs to provide the firm financial rewards for safe operations and/or effective loss control. They formulate programs and train their personnel to advance these and other services related to operations that enhance the profitability of the firm.

**Cash Flow**

Cash is king. It is the lifeblood of a construction firm. Of paramount importance for a contractor is its ability to fund operations and meet general company obligations. The firm must have sufficient cash to meet payroll, pay for materials and supplies, reimburse subcontractors, meet general company expenses, and satisfy the minimum liquidity requirements required by the covenants with its financial partners. Insufficient liquidity to meet these obligations can severely impact operational performance, the acquisition of new work, and ultimately the survival of the firm if a cash shortfall persists. Top performers realize that not only is effective cash management essential for an organization's financial health, but it can also increase the profitability of the firm.

Contractor cash flow and liquidity is greatly impacted by the profitability of operations, the firm's investment decisions, the quality of its assets, and the strength and support of the company's creditors. Accounts receivable, under-billings (cost-in-excess of billings), inventory, accounts payable, and over-billings (billings-in-excess) have a great deal of impact on the firm's cash flow. All of these variables influence the contractor's ability to fund its operations.

The length of time that a contractor must be able to fund operations  is essentially the difference between the length of time it takes the contractor to receive payment for inventory and work-in-place (Cash Conversion Period) versus the amount of time the firm has to pay its creditors. The difference is the firm's Cash Demand Period (CDP). Since most contractors have a low percentage of their assets invested in inventory, the key variables influencing the cash demand period are the average age of four balance sheet accounts: a) accounts receivable, b) cost-in-excess of billings (under-billings), c) days' payable, and d) billings-in-excess (over-billings).

To minimize the amount of cash needed to fund operations successful contractors strive to reduce their cash demand period by reducing the amount of time it takes to collect receivables, minimizing under-billing, maximizing the firm's overbillings, and exercising prudent use of trade credit. They collect cash receipt and disbursement information on a daily basis to calculate cash flow for each and every project. Management reports are generated monthly, weekly, and in some cases daily to convey cash flow performance and billing vs. cost information by project, group, business unit or profit center, and/or the entire company. These firms instill a culture of prudent cash management with a foundation of individual awareness and responsibility. They actively manage billings, accounts receivable, and creditor relationships.

*Billings:* Top performing firms promote aggressive billing practices that reduce or eliminate under-billing for work performed and promote prudent over-billing. They effectively manage:

- Billing format: top performers actively negotiate and encourage progress payments based upon a schedule of values, even with cost-plus GMP work. They discourage payment based upon invoice (cost) largely because it diverts project-management’s attention/focus, requires excessive accounting support, and invariably results in project costs being omitted from, or missing, the billing cycle.
- Under-billings: successful firms regularly report and aggressively manage project under-billings. They want to know the cause - particularly if it occurs late in a job. They realize that a persistently (or significantly) under-billed project often is associated with poor performance, quality issues, disputes or claims, and/or client dissatisfaction – issues that they know must be expeditiously and effectively addressed. They respond quickly to ensure that under-billings and receivables turn into cash.
- Unapproved changes: best in class discourage the performance of extra or changed work without an executed change order and/or a commitment for cost reimbursement. They track all costs, both actual and incurred, for work on unapproved CO’s. Excessive exposure, or a negative trend, triggers quick and decisive action by management.

*Accounts Receivable:* Successful firms recognize that the key drivers influencing the length of time to collect accounts receivables include:

- Client selection: a client's financial strength, business philosophy, and track record on payment can have a great deal of impact on how quickly a firm receives payment for work performed. Top performers target successful clients with a strong financial base and a solid track record exhibiting fair business practices. They realize that good clients drive low days’ receivable.
- Contractual terms: contractual terms for retainage, billing period, and progress payment dates impact the average age of receivables. Best in class negotiate minimal or no retainage, monthly billing, and quick payment periods. Some have even been successful in receiving a modest down payment prior to the start of the work.
- Collection policy: top performers have a formalized collection policy that is rigorously followed. They hold project management accountable for receipt of owner payment and senior management quickly gets involved with aged receivables – particularly those that approach 60-90 days. As stated by one surety, “Contractors are some of the most optimistic people in the world. They think they are going to win a dispute by next month and three years later, they settle for a fraction of the original claim”. If a receivable starts becoming hung or frozen, management of a successful firm wants details and swift action to improve the quality of the receivable.
- Client relationships: the best in class recognize the relationship between client satisfaction and payment policies. Satisfied clients tend to pay on time. Conversely, poor performance and slow payment are often associated with client dissatisfaction. The best in class actively monitor client satisfaction and quickly respond to legitimate client concerns.

*Credit Relationships:* Successful contractors also effectively manage their credit and creditors by developing prudent policies and practices for:

- Self-Performed Work: The best firms carefully determine the level of self-performed work for each project and the organization as a whole. They evaluate the risk/reward relationship of self-performing work and self-perform only when: a) it enhances their competitiveness and/or profitability, b) the organization has the internal resources and expertise to effectively self-perform, and c) the firm can meet the additional cash demands typically inherent when self-performing the work.

- Timely Payment: Successful firms recognize the time value of money as well as the importance of good subcontractor, supplier, banking, and other creditor relationships. They balance the need for prudent cash management with timely payment. These firms know that payables are driven by receivables. As a result, they aggressively collect receivables to permit payment of their creditors when balances are due, but do not make a practice of paying early except to capture early pay discounts. They practice a policy of 'pay when paid'.
- Line-of-Credit: top performers proactively establish an adequate working line of credit. They typically refrain from accessing this line to fund operations but recognize the desirable degree of flexibility it provides the firm. Bad things happen even to good firms, and good firms prepare for that possibility by establishing a line of credit well before it's needed.

**Leverage**

Financial leverage indicates the degree to which a firm has leveraged its equity relative to creditor debt or company volume. Leverage financial measures are generally considered 'company', rather than 'project' indicators, because the firm's equity or new worth is typically not identified with a single project except in large joint venture projects. Leverage indicators are also very important to the firm's financial partners and its creditors because they are associated with the firm's ability to repay its debts and the risk envelope of the firm. The Key Financial Indicators indentified by the participants in this category included 'Debt to Worth' and 'Revenue to Equity'.

*Debt to Equity (Net Worth)*: The majority of debt for most contracting firms is short-term debt. Most construction companies have limited long-term debt for several reasons. First, many general contractors self-perform only a small portion of the work and therefore need minimal plant and equipment, and the long-term debt normally associated with these fixed assets. Even large subcontractors that self-perform a substantial portion of their work have only approximately ten percent of their assets invested in plant and equipment (RMA, 2006). Secondly, incurring long-term debt to invest in nonaligned business opportunities is discouraged, particularly by sureties, because it lowers the firm's liquidity and diverts management's focus. Lastly, it is very difficult to acquire long-term debt for operating needs because of the risk and unpredictability of earnings in the construction industry. As a result, contractor debt is predominately short-term debt.

The firm's primary debt (credit) is secured from: a) subcontractors, sub-subcontractors, and suppliers that are performing work prior to payment, b) overbillings to owners, c) deferred taxes to the government, and d) short-term loans from financial institutions. With the exception of the short-term loan from financial institutions, the firm's creditors are typically providing interest-free credit. As a result, it is tempting for contractors to take advantage of these creditors.

However, the best performers prudently utilize debt and exercise good cash management techniques. They utilize short-term credit, but don't abuse it. They pay their bills when due, but not before and typically incorporate 'pay when paid' clauses in their contracts. However, the best recognize that unrealistically stretching payables can strain relationships, lower performance, and ultimately reduce the competitiveness of the firm.

*Revenue to Equity (Net Worth)*: Leverage indicators are important for management but take on added significance for the firm's creditors and its surety. Revenue to equity, and its companion indicator backlog to equity, are closely monitored by a contractor's surety. A high ratio is discouraged (or not allowed) by the surety because it affords the contractor less flexibility to absorb project losses. The acceptable limit of this ratio depends upon a number of variables including company size, type of work, contracting method, profitability, and track record with the surety. Within that context, top performers and their financial partners realize that a high revenue to equity ratio (or backlog to equity) places the contractor in a vulnerable position. As a result, the best performers temper revenue growth with profitability and retained earnings to ensure that the firm's equity remains in line with revenue expectations.

**Liquidity**

Liquidity is another financial measurement category that is primarily associated with company, rather than project, performance. The key financial measurements in this category are indicators of the firm's ability to meet its short-term obligations – the firm's ability to pay its bills. The key indicators indentified include 'Current Ratio' and 'Working Capital Turnover'. Because liquidity indicators are associated with the firm's ability to meet its short-term obligations they are also important to the firm's financial partners and creditors. The most important financial characteristics sureties look for in a contractor include adequate liquidity, lack of bank dependence, and reasonable debt leverage.

The current ratio measures the relationship of the firm's current assets and current liabilities. Firms with a low current ratio may have insufficient liquidity to meet current obligations. Undercapitalization of the firm, often stemming from operational losses, and the diversion of capital to plant, equipment, or other long-term investments are often the root causes of a low current ratio. Top performers recognize the need for liquidity and guide investment decisions accordingly.

Working Capital and Working Capital Turnover are additional leverage indicators important to successful firms and their financial partners. Working capital is simply the difference between a firm's current assets and current liabilities and working capital turnover is the firm's revenue divided by its working capital.

Working capital is considered a 'margin of protection' for creditors. It is an absolute measure of the liquidity of the firm and is an indicator of the firm's ability to meet its current obligation. Working capital is also a measure of the funds (liquidity) available for investment in operations to generate additional revenue. Working Capital Turnover is a measure of how aggressively these funds are used to generate work. Top performers recognize an appropriate balance between liquidity and growth. They have a commitment to growing their financial base and liquidity to support revenue growth.

Top performers recognize the importance of liquidity. They prudently manage their investments, work acquisition, debt, and capitalization of the firm to insure continued ability to meet their obligations. The best recognize that even well managed firms can experience an adverse interruption to cash flow and liquidity so they conservatively posture their firm to weather these occurrences.

**Forecasting**

To chart a successful path forward, one must understand and learn from the past. Company organizations and project teams that fail to effectively analyze past performance and use that insight to guide future actions are preparing for mediocrity or possible failure. Top performers are progressive and forward looking, but they respect the lessons and perspective provided by effective evaluation and analysis of past performance. They realize that this insight is invaluable for making prudent real-time decisions and to accurately forecast outcomes.

The key financial indicators that consistently surfaced with the analysis and forecasting activities of the top performers included backlog projections and performance (look-back) analysis.

*Backlog*: Successful firms recognize that backlog is the lifeblood of the organization. Too little and the firm will wither and die. Too much and the organization will be overwhelmed, possibly leading to failure because of its inability to perform. Ownership normally prefers, and sureties often impose, a reasonable relationship between owner's equity and the firm's backlog. The ratio of Backlog / Equity depends on a number of variables including company size, track record, profitability, type of work, company trends, and surety relationship.

Within the context of the constraints imposed by ownership and its financial partners, top performers manage the flow of work to effectively utilize their resources while maximizing the profitability of the firm. They accomplish this primarily by maximizing existing relationships, effectively managing new work acquisition, and proactively positioning their organization to take advantage of new or emerging opportunities.

The best in class realize that the biggest driver for new work (backlog) is operational performance. They recognize the importance of excelling on work they currently have with existing clients and delivery partners. Top performers develop future sales through performance excellence at the project level. They meet with clients and delivery partners regularly to solicit feedback on performance and to explore their future workload and service needs. As a result, the vast majority of their work is repeat business which drives down the cost of sales and increases operational efficiency and profitability.

To effectively manage workflow and the firm's resources the best performers track work as it is evolving in the pipeline – typically starting early in the development and design phase. They investigate all the project parameters to assess the viability of the project and the probability of their success. They project sales and revenue at least a year out. Business development teams meet regularly to evaluate each opportunity and proactively position organizational resources to maximize success.

To ensure that the firm is operating in the appropriate niche(s) and working with clients that offer superior financial opportunity top performers attempt to isolate all client and niche costs. Best in class firms go well beyond net profitability for a project or the firm. They attempt to isolate the key drivers of profitability. The most successful construction companies develop comprehensive accounting practices to effectively identify all the direct and indirect costs required to service a client and/or market niche. They slice and dice this data by project type, size, location, client, delivery method and other major variables influencing cost and profitability to determine the most effective and profitable deployment of organizational resources. The top performers don't go after every segment of the market but are always looking for fresh opportunities in existing markets/niches and are willing to explore new areas that show promise. They may even reduce fees to penetrate a promising market, but expand their business portfolio cautiously. Top performers are bottom line driven, but also recognize that reasonable growth is consistent with profitability and employee development and self-fulfillment.

*Performance (Look-back) Analysis*: Top performers analyze organizational performance at every level to determine current status, project outcomes, and to gain insight to guide future decisions and actions. The best in class track performance of their project teams. They compare estimated and projected with actual profitability. Performance data is collected and evaluated on a regular basis to isolate variances requiring corrective action. Financial performance drives tactical decisions and actions. They evaluate both snapshots of organizational performance and operational trends. Data is collected to develop performance trends that provide invaluable insight to guide tactical and strategic decisions regarding organizational strengths/weaknesses as well as market niche(s), client, and ultimately individual project selection.

The organization also tracks the financial performance on all service and product lines in order to understand the returns on each. Financial data is collected, organized, and formatted to reveal performance for each group, business unit, service sector, and profit center. This data is used in operational and business planning to realign or reposition resources on existing work and guide business development activities. They are continually attempting to learn from past performance and use the insight gained to position the organization to maximize future success.

## SUMMARY

Top performers utilize Key Financial Indicators to establish company focus and objectives, align organizational action, benchmark results, and reward performance. Key financial indicators measuring profitability, cash flow, firm leverage and liquidity are regularly assessed and the results communicated to the organization. Performance data is analyzed to guide organizational action and forecast outcomes.

Top performers recognize that profitability is the hallmark of a successful contractor and they continuously drive the organization to improve margins and profitability. They maximize operational performance and the indirect income sources associated with performance of the work. The best performers strive to balance the risk-reward relationship to ensure an appropriate return on the equity invested in the firm.

The best in class realize cash is king and that effective cash management is the lifeblood of the firm. They aggressively manage cash-flow through effective administration of the billing process, aggressive management of accounts receivable, and sensible actions regarding their creditors. Top performers effectively leverage their equity to gain access to the necessary credit to finance operations, but they do not abuse their creditors nor jeopardize their liquidity. The best performers are voracious consumers of performance data in order to forecast outcomes and gain insight to guide current activities and the future direction of the firm.

However, top performers realize that the key overarching drivers of the firm's success are its quest for operational excellence, their intense customer focus, and leadership's commitment to their employees (associates). Even though the top performers are already the most profitable and the best in their class, they are obsessed with operational excellence. They are constantly evaluating performance in an attempt to identify areas for improvement. Top performers have an intense focus on customer satisfaction and a keen desire to provide greater customer value and extended service offerings. Most organizational growth is from within. Top firms encourage individual growth and development and create an incentive system to promote and reward excellence. Success from ownership's perspective is not just making a profit, but providing rewarding and fulfilling employment for their personnel. The best utilize key financial indicators to reinforce the key drivers of firm success.



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