CLIENT SUCCESS CASE STUDY

Latex Toys Balloons Manufacturing

Transforming Regional Resources into Scalable Industrial Manufacturing Opportunity

CLIENT	LOCATION	INDUSTRY	SERVICE DELIVERED
M/s. Harrisons Malayalam Limited	Cochin, Kerala, India	Consumer Products / Latex Manufacturing	Techno-Economic Feasibility & DPR

ABOUT NPCS — ASIA’S PREMIER INDUSTRIAL CONSULTANCY & KNOWLEDGE ECOSYSTEM

Niir Project Consultancy Services (NPCS) is one of Asia’s most trusted industrial consultancy organizations, delivering techno-economic feasibility studies, detailed project reports (DPRs), market intelligence, and end-to-end investment advisory to entrepreneurs, corporations, and institutional investors across the globe.

NPCS is part of Asia’s leading industrial knowledge ecosystem with thousands of project profiles and global consulting expertise. For over three decades, NPCS has guided businesses from opportunity identification through to plant commissioning, helping clients transform investment ideas into profitable, sustainable manufacturing ventures.

Detailed Project Reports (DPR)	Bankable, investor-grade project reports covering market, technology, finance, and implementation.
Techno-Economic Feasibility Studies	Technical + financial evaluation to determine project viability before capital commitment.
Market Research & Demand Analysis	Primary and secondary research across industries, geographies, and demand segments.
Engineering & Implementation Advisory	Plant layout, machinery selection, process design, and phased implementation planning.

NPCS By the Numbers — Proven Authority in Industrial Consulting

150K+	**85**	**30+**	**150K+**
Detailed Project Reports Published	Countries with Active Clients	Years Industrial Consulting Expertise	Industrial Projects Supported

CLIENT OVERVIEW

Understanding the Investment Mandate

Client Name	M/s. Harrisons Malayalam Limited
Headquarters	Cochin, Kerala, India
Client Category	Large-Scale Industrial Investor
Project Identified	Latex Toys Balloons Manufacturing Unit
Consultancy Scope	Techno-Economic Feasibility, Project Identification, Market Assessment, Financial Evaluation, DPR Inputs
Outcome	Client Accepted NPCS Recommendation & Proceeded with Project Planning

M/s. Harrisons Malayalam Limited is an established business entity based in Cochin, Kerala, with the strategic intent to diversify into a scalable, resource-aligned manufacturing sector. The company sought a credible industrial consultancy partner to identify, evaluate, and validate a viable investment opportunity that would deliver long-term profitability while leveraging Kerala's regional resource advantages.

Client Investment Objectives — What the Client Was Looking to Achieve

The client approached NPCS with a clear set of investment criteria:

- Identify a manufacturing project with long-term profitability and scalable operations
- Align the investment with regional raw material availability and supply chain advantages in Kerala
- Ensure strong and consistent domestic and institutional demand for the product
- Maintain feasible capital investment with manageable risk exposure
- Secure independent, data-driven validation of the project's technical and financial viability

PROBLEM STATEMENT & CHALLENGES

Key Hurdles Addressed Before Project Commitment

Before any capital allocation decision, the client needed clarity across several critical dimensions of risk and feasibility. NPCS was engaged to systematically address these challenges:

Market Intelligence Gap	The client lacked reliable data on domestic demand, growth trajectories, competitive landscape, and pricing dynamics in the latex balloon sector.
Financial Risk Assessment	Without an independent financial model, investment costs, revenue projections, break-even timelines, and return metrics remained unvalidated.
Technical Feasibility Unknowns	The manufacturing processes, plant machinery specifications, production capacity planning, and technology selection required expert evaluation.
Supply Chain & Raw Material Risk	The availability, pricing stability, and logistics of natural rubber latex — the primary raw material — needed systematic evaluation.
Regulatory & Compliance Complexity	Setting up a manufacturing unit involves navigating environmental clearances, industry registrations, and quality compliance requirements.
Project Identification Risk	Without structured project identification methodology, the risk of investing in a misaligned or unviable manufacturing venture remained high.

NPCS CONSULTING APPROACH & METHODOLOGY

A Structured, Data-Driven Investment Advisory Process

NPCS deployed its proven six-phase consulting methodology to guide Harrisons Malayalam Limited from opportunity identification through investment validation:

01	**Project Identification & Screening**	NPCS evaluated multiple industrial investment opportunities aligned with the client's capital profile, regional advantages, and strategic objectives. Latex Toys Balloons Manufacturing was identified as the optimal fit based on raw material proximity, demand consistency, and investment feasibility.
02	**Market Potential Assessment**	A comprehensive primary and secondary market study was conducted covering domestic consumption trends, import-export dynamics, competitive landscape, and growth drivers across key demand segments including retail, event management, educational, and promotional markets.
03	**Raw Material Availability Analysis**	NPCS evaluated Kerala's natural rubber latex ecosystem — supply volumes, quality standards, pricing benchmarks, and logistics infrastructure. This analysis confirmed a significant sourcing advantage for a manufacturing unit located in the region.
04	**Technical Feasibility Assessment**	A detailed technical review was conducted encompassing manufacturing process flow, balloon dipping technology, plant machinery specifications, production capacity planning, quality control systems, and utilities requirements.
05	**Financial Modeling & Viability Evaluation**	NPCS developed a comprehensive financial model covering total project cost, capital expenditure breakdown, operating cost estimation, revenue projections, profitability analysis, break-even assessment, ROI, IRR, and payback period.
06	**Implementation Roadmap & Risk Assessment**	A phased project implementation strategy was developed, including plant setup sequencing, operational readiness planning, key risk identification, and mitigation strategies for supply chain, market, and operational risks.

SCOPE OF SERVICES DELIVERED

End-to-End Industrial Advisory by NPCS

NPCS provided a comprehensive suite of consulting deliverables to support the client's investment decision:

Consulting Deliverable	Key Components
Project Opportunity Identification	Multi-project screening, opportunity alignment, investment fit analysis
Market Research & Demand Study	Sector demand, growth forecasts, competitive benchmarking, pricing trends
Technical Feasibility Study	Process flow, machinery specs, plant layout inputs, production capacity
Financial Viability Assessment	CapEx/OpEx modeling, revenue projections, ROI, IRR, payback period
Raw Material & Supply Chain Analysis	Latex sourcing, vendor landscape, cost benchmarks, logistics evaluation
Detailed Project Report (DPR) Inputs	Bankable project summary for financing, planning, and approvals
Risk Assessment & Mitigation Strategy	Operational, market, financial, and regulatory risk profiling
Implementation Roadmap	Phased execution plan, milestone framework, operational readiness guidelines

PROJECT EXECUTION TIMELINE

Phase-Wise Delivery & Milestones

The consulting engagement was executed in structured phases to ensure thoroughness, accuracy, and timely delivery:

Phase	Activity	Key Milestone / Deliverable
Phase 1	**Client Onboarding & Brief**	Investment objectives defined; project screening criteria established
Phase 2	**Industry & Market Research**	Market demand analysis completed; growth trends mapped; competitive landscape profiled
Phase 3	**Raw Material Assessment**	Latex sourcing evaluation finalized; regional supply chain advantages confirmed
Phase 4	**Technical Evaluation**	Manufacturing process documented; machinery specifications identified; plant capacity modeled
Phase 5	**Financial Modeling**	Full project cost model developed; profitability projections, ROI, IRR, and payback period computed
Phase 6	**Report Compilation & Presentation**	Techno-economic feasibility report and DPR inputs delivered to client
Phase 7	**Client Review & Decision**	Client evaluated findings; accepted NPCS recommendation; proceeded with project planning

TECHNICAL INSIGHTS

Manufacturing Process & Technology Overview

NPCS conducted a detailed technical assessment of the latex balloon manufacturing process, covering process flow, machinery requirements, and production technology considerations.

Manufacturing Process — Step by Step

01	**Raw Material Preparation**	High-grade natural rubber latex is sourced and prepared with compounding chemicals including stabilizers, accelerators, and colorants to achieve optimal viscosity and dipping properties.
02	**Mould Preparation (Former Dipping)**	Balloon formers (moulds) are cleaned, dipped in coagulant solutions, and dried to create a uniform base layer that promotes latex adhesion during production.
03	**Latex Dipping Process**	Formers are dipped into latex compound through automated or semi-automated dipping machines for multiple cycles to build up the required latex film thickness.
04	**Leaching & Washing**	Dipped latex films are leached in warm water to remove residual chemicals and water-soluble proteins, improving product safety and compliance.
05	**Beading (Lip Formation)**	The balloon lip (bead) is rolled or formed mechanically to ensure structural integrity and ease of inflation.
06	**Vulcanization (Curing)**	Balloons are passed through curing ovens where controlled heat triggers vulcanization — the cross-linking of latex polymers — to achieve final elasticity, tensile strength, and durability.
07	**Stripping & Quality Inspection**	Cured balloons are stripped from formers by hand or automated strippers and subjected to visual and dimensional quality checks.
08	**Printing & Decoration (Optional)**	Customized balloons undergo screen printing, offset printing, or pad printing for branding and promotional purposes.

09	**Packaging & Dispatch**	Approved balloons are sorted, counted, packaged (bulk or retail packing), and prepared for dispatch to domestic distributors or export markets.

Key Machinery & Equipment

- Automated / semi-automated latex dipping machines
- Balloon former racks (glass, porcelain, or aluminium formers)
- Coagulant dipping tanks and latex compound tanks
- Curing ovens (gas-fired or electric vulcanization tunnels)
- Leaching / washing tanks with temperature control
- Automatic stripping machines and inspection conveyors
- Compounding and mixing equipment for latex preparation
- Printing machines (optional, for custom/promotional balloons)
- Packaging lines and counting/sorting equipment

FINANCIAL & MARKET ANALYSIS

Investment Outlook and Commercial Viability

Project Investment Overview

Based on NPCS financial modeling, the project demonstrates a balanced and attractive investment profile with moderate capital requirements relative to the revenue potential:

Total Project Cost (Indicative)	Moderate-to-Medium CapEx (scale-dependent; site-specific estimation required)
Land & Civil Infrastructure	Acquisition, construction of factory shed, utility buildings, storage
Plant & Machinery	Dipping machines, curing ovens, compounding equipment, formers
Raw Material Procurement	Initial latex stock, chemicals, packaging materials
Working Capital Requirement	3–6 months operational requirement for sustained production continuity
Revenue Model	Domestic B2B & B2C sales + export market revenues
Estimated Payback Period	Competitive payback timeline based on scale and market penetration
IRR (Internal Rate of Return)	Attractive double-digit IRR achievable at optimal capacity utilization
Break-Even Point	Achievable within initial operating years with efficient capacity ramp-up

Investment Cost Distribution (Indicative)

Investment Head	Approx. Share (%)	Priority
Land & Civil Works	20–25%	High
Plant & Machinery	35–40%	Critical
Raw Material & Inventory	15–20%	High
Pre-operative Expenses	5–8%	Moderate

Investment Head	Approx. Share (%)	Priority
Working Capital	10–15%	Essential
Contingency Reserves	5%	Recommended

Market Demand & Growth Outlook

- Rapid growth of India’s event management and wedding decoration industry fuelling consistent volume demand
- Expanding retail toy market driven by rising disposable incomes and urbanization across Tier 1, 2, and 3 cities
- Year-round promotional balloon demand from corporate marketing campaigns, product launches, and brand activations
- Institutional demand from schools, colleges, theme parks, and entertainment venues for educational and recreational use
- Growing export potential to Southeast Asia, Middle East, Africa, and European markets for competitively priced Indian-made balloons
- Import substitution opportunity as India currently imports a portion of latex balloon requirements from China and Southeast Asia

Kerala’s Strategic Raw Material Advantage

Kerala accounts for a significant share of India’s natural rubber production, making it one of the most strategically advantageous locations for latex-based manufacturing. A manufacturing unit based in Cochin benefits from:

- Proximity to rubber plantations reducing inbound logistics costs and lead times
- Access to an established rubber processing and latex supply ecosystem in the region
- Port connectivity at Cochin enabling efficient export logistics for international market access
- Availability of skilled and semi-skilled labour familiar with rubber and latex-based manufacturing

RESULTS & OUTCOMES

Value Delivered to the Client

The NPCS consulting engagement delivered comprehensive, data-driven outcomes that gave M/s. Harrisons Malayalam Limited the confidence to move forward with their manufacturing investment:

Validated Investment Decision	Independent NPCS validation eliminated guesswork and provided a rigorous data foundation for capital allocation.
Market Clarity & Demand Confidence	Comprehensive market intelligence mapped demand drivers, growth trends, and competitive dynamics for the balloon sector.
Risk Identification & Mitigation	Key investment risks across market, supply chain, technical, and financial dimensions were identified with mitigation frameworks.
Strategic Positioning & Export Roadmap	The client was positioned to leverage both domestic demand and international export opportunities in a globally competitive product category.
Raw Material Advantage Confirmed	Kerala’s natural rubber ecosystem was validated as a significant competitive advantage for cost efficiency and supply reliability.
Bankable Project Foundation	DPR inputs and financial modeling provided a solid foundation for financing discussions, partner negotiations, and regulatory submissions.

CLIENT TESTIMONIAL

> *“NPCS provided exceptionally valuable insights that helped us identify a viable and strategically aligned manufacturing opportunity. Their comprehensive techno-economic analysis and rigorous market evaluation gave us the clarity, data confidence, and strategic direction we needed to move forward with full conviction. The NPCS team demonstrated deep industrial expertise, professional rigor, and genuine commitment to our investment success.*

— Management Team, M/s. Harrisons Malayalam Limited, Cochin, Kerala

WHY CHOOSE NPCS — THE NPCS DIFFERENCE IN INDUSTRIAL CONSULTING

When you partner with NPCS, you gain access to a globally recognized consulting ecosystem built on three decades of industrial expertise, data-driven analysis, and a deep commitment to client investment success.

✓ **Proven Industrial Expertise**	30+ years and 150K+ project reports across manufacturing, agro-processing, chemicals, food, textiles, energy, and emerging sectors.
✓ **Global Market Understanding**	Clients across 85 countries with insight into international demand, trade flows, import-export dynamics, and global competitive landscape.
✓ **Data-Driven Feasibility Approach**	All recommendations are grounded in primary research, verified market data, and rigorous financial modeling — no assumptions, only validated insights.
✓ **End-to-End Project Support**	From opportunity identification to DPR, from market entry to plant setup guidance — NPCS supports the full investment lifecycle.
✓ **Risk Mitigation First**	NPCS identifies and quantifies investment risks upfront, enabling clients to enter projects with clear risk visibility and mitigation plans in place.
✓ **Sector-Agnostic Depth**	Whether manufacturing, food processing, chemicals, textiles, rubber, or technology — NPCS brings deep sector-specific knowledge to every engagement.

CONCLUSION — STRATEGIC VALUE DELIVERED

The NPCS advisory engagement with M/s. Harrisons Malayalam Limited exemplifies how structured, data-driven industrial consultancy can transform an investment idea into a validated, actionable business plan.

By leveraging Kerala’s natural rubber ecosystem, validated domestic demand signals, and the attractive economics of the latex balloon manufacturing sector, NPCS enabled the client to make a confident, well-informed investment decision — backed by rigorous techno-economic analysis and comprehensive market intelligence.

The engagement demonstrated NPCS’s unique ability to deliver McKinsey-quality industrial consulting with the speed, affordability, and regional depth required for emerging market manufacturing investments. From project screening to financial modeling and implementation planning, NPCS provided a 360-degree investment advisory framework that reduced risk, enhanced clarity, and accelerated decision-making.

> *M/s. Harrisons Malayalam Limited’s decision to proceed with the Latex Toys Balloons Manufacturing Unit represents a compelling example of how expert consultancy can unlock industrial opportunities that might otherwise go unrecognized or undervalued.*

READY TO BUILD YOUR NEXT INDUSTRIAL PROJECT?

Partner with NPCS to transform your investment idea into a profitable manufacturing venture.

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