

# [There not having enough cad licensesin short,](https://assignbuster.com/there-not-having-enough-cad-licensesin-short/)

[Business](https://assignbuster.com/essay-subjects/business/), [Industries](https://assignbuster.com/essay-subjects/business/industries/)

There are many reasons why manufacturing companies outsource their CAD/Engineering design work. •    To bring product to market faster•    To reduce the product/machine cost by minimising the engineering cost.•    Core team can focus on critical activities and can be outsourced less critical work to vendors.

•    Difficult to hire suitable expertise in a short span of time.•    Hiring expertise may be expensive•    Not having enough CAD licensesIn short, Engineering Services Companies provide surge capacity and flexibility that companies require when they are developing sophisticated systems under aggressive schedules. In short, Engineering Services Companies provide surge capacity and flexibility that companies require when they are developing complex systems under aggressive schedules. Benefits of Outsourcing1.

Speed of Deployment•Company’s standard workflow to the table when needed. Outsourcing can be an immediate solution for hot projects to kick off the project within a month. Outsourced engineering services afford a quicker time to market and lower overall costs. 2. Focus: Outsourcing the project help you to focus on the Project requirements, Critical activities, and deadlines. Otherwise, your engineers get disturbed with multiple projects and doing maintenance engineering.

The company has the option what activities they can focus inside and what activities they can outsource. •    So the manufacturing company has focus and easy to achieve milestones. 3.

Knowledge Transfer:•    Engineering Services Companies follow the well-defined process and do documentation on training to ensure attrition not impact the existing customer. 4. Consistency in results•    Engineering Services Companies provide sustainable intellectual property and best transfer for core knowledge than hiring internal staff and training. They also depute engineers to client location till the project completion.•    Engineering Services Companies monitor and document engineering hours better than in-house engineering as they need to get approval for every hour they spent. 5.

Greater Breadth of Experience•    Engineering Services Companies are adept at bringing the best practices in the industry to your company and your project as they are exposed to a vast array of industries, projects, and companies and thus has a broader set of experiences which help in your project to get the optimal solution. It can be finding a smart technical solution or implementing a process that works. Checklist to choose Outsourcing Company1. How long are they in the Industry? Their presence in globe2.

Current and Past Clientele and their feedback (ask them to share if not confidential)3. Well defined Outsourcing process4. Data Security and Confidentialityo    Manned Securityo    Fire Wallo    Non-Disclosure Agreement6.

Core Knowledgeo    Engineering Drawingo    First Angle Projection Methodo    Third Angle Projection Methodo    GD & TUnit Systemo    Imperialo    MetricManufacturing Processes and DFMA (Design for Manufacturing and Assembly)o    Castingo    Forgingo    Machiningo    Sheet Metalo    Tolerance Analysiso    OEM Parts Selection7. International Standardso    ASME/ANSI8. Infrastructure/Communication facilitieso    International Callingo    Web Conferenceo    Video Conference9. CAD Tool Application. What tools they have and How many? o    AutoCADo    Inventoro    Solidworkso    Catiao    NX/Unigraphicso    Pro Engineer/Creoo    Sketchupo    Solidedgeo    Ansys10. What all Analysis they are familiaro    Static FEAo    Dynamic FEAo    Thermal FEAo    CFD (Computational Fluid Dynamics)11. What Data Management Software the company is familiaro    Solidworks PDMo    Adepto    Wildfireo    Teamcenter12. What Services is the Engineering Services Company Offering? o    CAD Data Migrationo    2D Draftingo    3D Modelingo    CAD Customization/Design Automationo    Product Design/Industrial Machine Designo    Reverse Engineeringo    Re-Engineeringo    Jigs & Fixture Designo    Press tools and Forging Die Designo    Value analysis / Value engineering (VA/VE)o    Finite Element Analysis (FEA)o    3D Animation and Renderingo    Electrical and Controlso    Sustenance Engineering (Engineering Change Order/Management)o    Technical Publications13.

Engineering Staff. How many? o    Qualifications?    High School  Graduate?    Graduate Engineer?    Master Engineeringo    Certifications•CAD Application CertificationoSolidworks Certified ProfessionaloInventor Certified Professional•PMM (Project Management Professional)14. Office Timingso    Time Differenceo    Number of Hours opened?    24/7?    18/7?    18/515. Quality Management Systemo    ISOo    Kaizeno    Poka Yokeo    Six Sigma16. What type of Engagement Models?•    Project to Project (Fixed Time and Cost)•    Full-Time Engagement17.

What Industries the Engineering Services Company servingo    Automotiveo    Locomotiveo    Aerospaceo    Energyo    Oil & Gaso    Semiconductoro    Miningo    Industrialo    Machine Tools18. Manufacturing Services/Supporto    Machiningo    Castingo    Assembly