Should I Buy Or Build Application Software?

Today, mid-sized to large retailers often face a difficult question about their order management system needs. An age old question of whether to buy or build their own software solution emerges. Many retailers have competent IT organisations, but not necessarily strong software development practices. For technology like order management systems, strong and feature rich solutions already exist which are thoroughly field tested. However, like snowflakes, every retailer is unique. There are unique products, SKUs, services, brands, abilities, and workflows in each retailer. It is not difficult to understand why a retailer might want to build a customized solution to meet every minute detail and whim of their firm. However, after reviewing much of the public research in this field, a strong theme resonates. If field tested software is already available and meets 80% or more of your needs then BUY the solution. This allows an organization to focus resources on integrating, improving what already exists, and enhancing customer services.

Software Projects with Challenges

Projects with Cost Overruns — **66%**

Projects with Schedule Overruns — **33%**

17% — Projects with Feature Shortfalls [5]

Keys To Success

Four groups of issues caused most IT project failures, as identified in the McKinsey-Oxford study:[5]

1) Strategy & Stakeholders: Success goes beyond managing the project purely on budget, schedule targets and technical content. Align the project to the company's overarching business strategy, and stakeholder motivations & concerns.

2) Master Tech & Content: Draw on technical expertise as well as business centric experts - as needed. Well run software development requires a holistic picture of business, infrastructure, IT architecture, quality, functionality, etc.

3) Build Effective Teams: Focus on building a high cohesion team with a unified vision, common goals, incentives, shared processes, and an aligned culture for the project development team.

4) Project & Product Management: There is no replacement for a strong, experienced and disciplined project management practice in software development. In agile development, this is often the scrum master. Product ownership is also key to containing scope creep, and prioritizing features, functions, timing and architecture.

Failure Rates

Most of the public research into IT development projects highlight the copious risks and challenges inherent in them. An example is a study of 5400 IT projects undertaken by McKinsey and the University of Oxford. As shown in the graph above, 66% of software development projects experienced cost overruns, 33% of the projects experienced schedule overruns, and 17% of them experience feature shortfalls.[5]

Standish Group's CHAOS results summarize small to large firm projects. Average failure rates, overruns on cost and time to market, and content shortfalls all paint a bleak picture. In fact 31.1% of projects were cancelled before completion.[1] Results like these are a red flag for IT executives in retail.

Another study by HBR found that one in six IT projects experienced cost overruns exceeding 200%.[4]

Company Size	Failed or Challenged	Cost Overruns	Time Overruns	Content Shortfall
Large	61.5%	178%	230%	58%
Medium	46.7%	182%	202%	35%
Small	50.4%	214%	239%	26%

1

order dynamics
OMS BRIEFS

Build or Buy - Order Management?

Many pros and cons of building or buying software are listed in the chart below. Realistically, given the high failure rates, and downside potential - retailers should only consider a build option when: systems on the market don't meet 80% of their needs, the system is a significant and unique competitive advantage, time to market is not important, and there is significant technical / functional expertise available. For order management there are many benefits to purchasing from a specialized vendor with deep functional expertise. It is a low risk decision to buy and integrate a robust, field tested solution. Reviewing the buy-side, the challenge is to focus on avoiding overbuying features bundled into large suite which are not needed, rather than the deep functional power of a Best-of-Breed solution.

|	Build	Buy
Pro	-Designed for capacity needed -Custom built for single business need -Serves a unique business need -Efficiency of specialized S/W vs Suite	-Low initial cost & TCO -Fastest time to market -Certifications included (PCI, SOC2 ...) -Scalability (Built into SaaS, load tested) -Features developed & robust -Leverages expertise of specialists -Market tested S/W (no bug fix req'd) -Continually updated cycle (SaaS) -Leverages best industry practices -Lets you focus on retail strategy
Con	-High startup costs -Long S/W build cycle -NOT pre-tested (QA cycle req'd) -Locked-in solution (no auto updates) -Key resource dependant (continuity) -Lack of support / upgrade procedures -H/W & hosting overhead	-Few custom features (restrictive) -Large S/W Suite: unnecessary features -Large Suite can be difficult to integrate

Risks of Building

As a retailer, taking on a major software development project should be considered with caution. Beside the significant downside potential, project risks to consider include:

- Scope creep (growing feature list)
- Budget cuts can jeopardize project completion
- Long term locking into one technology
- Poor coding practices
- Initial releases have many frustrating bugs
- Project costs may be under estimated
- Under scoped projects lead to lengthy delays
- Staff lack deep functional expertise
- Understaffed for full project breadth
- Management support may falter on lengthy and costly projects

Recommendation

The weight of evidence does not favor success in IT projects undertaken by non software development firms. Research from McKinsey, Oxford, Gallup, HBR, and Standish Group - articulate risks and overruns associated with these projects. Failed projects are not only bad for the company, but affect the brand and decision makers career. An astounding 17% of IT projects even threaten the very existence of the firm.[5]

Mid to large retailers must strongly consider buying a field tested, best-of-breed solutions for mission critical software like an OMS. Integrating and configuring a system reduces your risk of failure. It will contain costs, deliver a faster solution, is highly scalable and provides necessary features and functionality for your retail business.
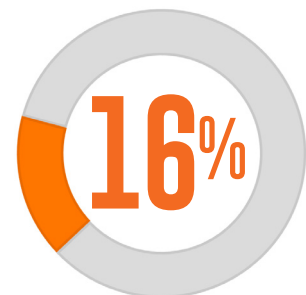
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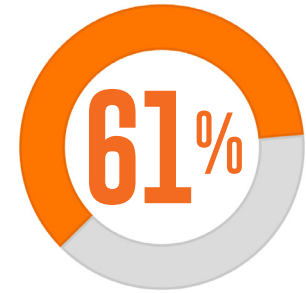
Failed or Challenged (not successful)IT projects observed by Standish CHAOS report in 2015.[1]

$3.4 TRILLION

Gartner's estimate of 2016 annual Worldwide IT spending.[2]

$150 BILLION

Gallup estimated IT failure rates costing US alone $50 - $150 Billion. IT project failures for European Union estimated at €142 Billion.[3]

16%

Software development projects completed on-time and on-budget according to Standish CHAOS.[1]

Contact Us:

Connect with OrderDynamics for a quick demo or to discuss how it can help you!

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