Driving profitable growth: the productivity challenge in China
Driving profitable growth: the productivity challenge in China
Executive summary

It is widely accepted that raising productivity will be critical if China is to keep growing and avoid the so-called ‘middle income trap’. Government policy is already pushing companies to improve their productivity, and the pressure will only increase in the coming years. This report assesses how ready companies in China are for the challenge of productivity improvement, and sets out the key areas that high-performing companies will need to tackle to take their productivity performance to the next level. We surveyed executives and senior managers from over 1,700 domestic and international companies in China on both trends in the Chinese business environment and individual organizations’ operational practices.

We found that whilst companies in China by and large continue to be profitable, profit margins are increasingly coming under pressure. Almost half of our respondents reported that their companies’ margins had fallen compared to two years ago, twice as many as those that said their margins had risen. In most sectors, revenue growth has slowed while cost inflation continues unabated, resulting in a painful profit squeeze.

Our respondents were united in telling us that there was little or no scope for customers to absorb expected cost increases. As a result, the consistent message across different industry sectors and ownership groups was the urgent need to drive productivity improvement.

The key question though is where these productivity improvements are going to come from. To answer this, we analyzed in some detail the operational effectiveness of the companies in our survey across a wide range of competency areas, both to assess their capability in terms of productivity achievement and to identify common trends.

Four key messages emerged from this analysis. First, there are very wide differences in profitability and operational maturity between companies in the same sectors – with a long ‘tail’ of poorer performers. For the economy as a whole, therefore, probably the single biggest opportunity for improving productivity will come from targeted improvements in those companies that are ‘lagging’ their peers.

Second, domestic companies are catching up fast. Over a quarter of domestic enterprises now consider themselves to be at least equal to the average foreign company in China in terms of their operational effectiveness, a trend that is likely to continue. That said, the majority of local firms are still lagging behind their foreign counterparts and they undoubtedly have substantial scope to drive productivity by introducing leading practices to their operations.
Third, we looked separately at the most profitable companies in our sample to see if there were any common features of their success in terms of operational effectiveness. The most striking conclusion was the extent to which these top performing companies have adopted a transformational approach to productivity improvement – building expertise and capability across a wide range of competency areas. In simple terms, top performing companies have typically gone beyond incremental changes and moved on to develop and execute on a clear transformation agenda designed to achieve lasting improvements across the business, straddling traditional organizational silos.

Fourth, these top performing companies have developed particularly strong capability – or ‘maturity’ – in five specific operational areas: long range strategic planning, standardization of operating processes, robust internal controls, effective workforce planning and strong technology infrastructure. All five of these practices are strongly correlated with high profitability and would therefore appear to be an obvious area of focus for companies seeking to drive a step change in their productivity.

The encouraging message from this analysis is that these improvements do not typically require significant financial investments and can be readily replicated between companies and sectors. They do, however, require strong and sustained leadership involvement and commitment to drive through change. Leaders at all levels need to consider how their organizations can immediately start to build and implement the capabilities that will be essential to meet the challenges of China’s productivity imperative.
Introduction: the productivity imperative

As we reported in our recent study of trends in China’s macroeconomic productivity,1 companies operating in China have had a good run in the past decade, benefiting from world-beating productivity gains, an expanding labor force, rising inflows of investment, and accommodating government policies that have kept the price of inputs low. Demand has been supported by domestic investment in industrial capacity and infrastructure and – until the global financial crisis – steady growth in the world’s major markets.

What’s different now?

The previous engines of growth in China are running out of steam. It is well known that growth in exports has slowed significantly in the past three years as a result of gloomy conditions in key markets in Europe and North America. Within China, demographic change, environmental concerns, and other imbalances are impelling China to alter the speed and nature of its growth.

This has coincided with a fall in China’s productivity growth. Earlier rounds of market liberalization and privatization have largely run their course, and the mass reallocation of labor from low productivity agriculture to higher productivity manufacturing is drawing to an end. Although timely government intervention helped China to sustain high growth rates in 2008–09, the rapid expansion of capital investment has led to a decline in capital efficiency, and will eventually inhibit growth if productivity does not accelerate.

Raising productivity is now therefore critical for China’s economic future.

Productivity on the government agenda

Companies can expect increasing pressure to raise productivity in coming years. The Chinese government’s industrial policy will give incentives to raise productivity, and penalize unproductive and wasteful companies.

The government is expected to implement further reforms to labor, capital and natural resources markets in line with the 12th five-year plan’s binding targets to lift average incomes and increase resource efficiency. This, in turn, is likely to make cost inflation a permanent feature in a slowing economy, something that most companies in China have yet to experience.

Productivity will be driven by firm-level improvements

As the benevolent conditions of the past decade wane, productivity growth will increasingly have to come from improvements at firm level. This is an important change. For companies, the challenge goes beyond simple cost cutting. If companies are to continue to grow profitably, they will need to make much deeper and longer lasting improvements in their management and operational practices, use of technology and the application of innovation to their business.

This report assesses how ready companies in China are for the challenge of productivity improvement, and sets out the key areas that high performing companies will need to tackle to take their productivity performance to the next level.

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1 China’s productivity imperative (Ernst & Young, September 2012).
About this report

The survey on which this report is based was designed by Ernst & Young and carried out by FT Chinese between November 2012 and January 2013. In total, senior executives and managers from over 1,700 companies in China responded to our questionnaire. We also undertook follow-up interviews to test and validate the main findings.

Our survey sought views on both trends in the Chinese business environment and individual organizations' operational practices. For this purpose we targeted both executives with a strategic view of their firms' performance as well as senior managers with more knowledge of day-to-day operations.

To our knowledge, this has been the largest survey of companies' operational practices ever undertaken in China. We gratefully acknowledge all those who took part.

We would also like to thank Teng Bingsheng, Associate Professor of Strategic Management at the Cheung Kong Graduate School of Business for his helpful comments on an earlier draft.
Driving profitable growth: the productivity challenge in China
Companies remain profitable

Companies in general continue to be profitable in China, suggesting that the economy remains in good health. Only 3% of companies surveyed reported that they were unprofitable in the past financial year.

Average earnings before tax, depreciation and amortization (EBITDA) was an impressive 20.9% overall. The gap between companies’ financial performance though is substantial. The top 10% of companies achieved an average EBITDA margin of 40% compared with just 5% for the bottom 10% of companies.

For the last full financial year, what was your company’s approximate earnings before interest, taxes, depreciation, and amortization (EBITDA) margin in China?

Source: FT Chinese, Ernst & Young
Foreign multinationals reported the highest profitability — the top decile achieved an average EBITDA margin of 44%. In contrast, joint venture enterprises between foreign and local companies underperformed the wider group. Overall, there was surprisingly little variance between ownership groups in terms of average profitability.

The healthcare sector reported highest profitability with an average EBITDA margin of 25.2%, followed by financial services, and technology. The industrial goods sector, on the other hand, dented by overcapacity issues, was the poorest performer, with average EBITDA margin of 16.2%.

Perhaps most significantly, the survey revealed big gaps in financial performance within the same sectors with a long 'tail' of poorer performing companies. Against a background of increasing competitiveness in each sector, we expect the gap in profitability to widen over the next 24 months.

For the last full financial year, what was your company’s approximate earnings before interest, taxes, depreciation, and amortization (EBITDA) margin in China?

Source: FT Chinese, Ernst & Young
Companies are focused on profitable growth

All in all, companies continue to be optimistic about China’s potential domestic demand in the years ahead, and are still very much focused on growing revenue. Indeed, 2013 may well be the first year that the Chinese economy is said to be “consumption-led”, meaning that domestic consumption will contribute more to growth than investment or exports.

When asked which areas could have the most impact on company profitability in the next 24 months, almost half of our respondents said that the area that could have the greatest impact on profitability was geographic expansion into more profitable markets. Significantly, however, the second most important area identified by our survey respondents was the need to increase productivity.

Other areas that featured strongly in our responses were the introduction of new and better products and services, and an increased focus on research and development, both of which are closely linked to the key issues of product and service differentiation.

What are the areas that can have the most impact on your company’s profitability in the next 24 months?

- Geographic expansion into more profitable markets: 46%
- Increased productivity: 37%
- Introduction of new and better products/services: 33%
- Increased focus on research and development: 30%
- Retaining and developing existing talent: 29%
- Adapting more strategically to new regulations: 24%
- Restructuring of current operations: 19%
- Exit from certain less attractive markets: 16%
- Hiring new/better talent: 14%
- More sophisticated pricing management/optimization: 12%
- Undertaking mergers and acquisitions: 9%
- Better use of outsourcing/subcontracting: 7%
- Increase in capital investments: 7%
- Reduction in capital investments: 3%

Source: FT Chinese, Ernst & Young
Profit margins increasingly under pressure

One reason for the increased focus on productivity is that profit margins are increasingly coming under pressure. Almost half of respondents reported that their companies’ margins had fallen compared to two years ago, twice as many as those that said their margins had risen.

In most sectors, revenue growth has slowed but cost inflation continues unabated, resulting in a considerable profit squeeze. Foreign multinationals felt this most acutely, perhaps because they rely more on export markets in developed countries, where demand remains weak. State-owned enterprises, which are typically less trade-exposed and tend to operate in less competitive environments, fared better than other groups, but even in this group, 42% of respondents said their profit margins had declined.

Our sector analysis shows that the services sectors generally fared better, among them healthcare, and financial services. The services sector overall has been seeing rising employment for the past four consecutive years, and will benefit from ongoing governmental emphasis on growing China’s tertiary industries.

The slowdown looks to have hit the hardest in the industrial sector, particularly telecommunications, industrial goods, and consumer goods. Overcapacity is an issue in a number of industries within the industrial goods and consumer goods sectors, and companies have been forced to cut prices as a result.

How does your company’s current EBITDA margin in China compare to two years ago?

<table>
<thead>
<tr>
<th>Sector</th>
<th>Increased</th>
<th>Stayed roughly the same</th>
<th>Decreased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilities</td>
<td>27%</td>
<td>35%</td>
<td>37%</td>
</tr>
<tr>
<td>Healthcare</td>
<td>26%</td>
<td>37%</td>
<td>37%</td>
</tr>
<tr>
<td>Financial services</td>
<td>34%</td>
<td>26%</td>
<td>40%</td>
</tr>
<tr>
<td>Technology</td>
<td>19%</td>
<td>36%</td>
<td>45%</td>
</tr>
<tr>
<td>Consumer services</td>
<td>29%</td>
<td>26%</td>
<td>45%</td>
</tr>
<tr>
<td>Basic material</td>
<td>19%</td>
<td>31%</td>
<td>50%</td>
</tr>
<tr>
<td>Consumer goods</td>
<td>23%</td>
<td>25%</td>
<td>52%</td>
</tr>
<tr>
<td>Industrial goods</td>
<td>18%</td>
<td>21%</td>
<td>61%</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>21%</td>
<td>16%</td>
<td>63%</td>
</tr>
</tbody>
</table>

Source: FT Chinese, Ernst & Young
The structural slowdown in growth has undoubtedly played a part in the decline in profitability. Rising costs are the other important part of the equation. The most well publicized have been year-on-year double digit growth in labor costs, but as we have shown in a recent macroeconomic study on China’s productivity trends, the past few years have also seen increases in the cost of raw materials in China, particularly energy and food commodities.2

We believe that cost inflation will continue to be the norm for the foreseeable future. It is already well publicized that the government intends to significantly boost per capita annual income and to oversee a progressive increase in minimum wages.

Comprehensive price reforms in energy markets, starting with natural gas and thermal coal, will see the cost of energy rise for all companies. Stricter environmental regulations will add another layer of costs for energy-intensive and high polluting industries, and this will have a flow on effect through the entire supply chain. For example, the State Council has already issued a timetable for oil companies to deliver cleaner fuel nationwide in 2013, which will mean higher transportation costs for all industries.

Long-awaited interest rate liberalization is likely to lead to a higher cost of funding for companies that currently have easy access to credit. Highly leveraged companies in this category may face difficulties in financing their investments, and will have to adjust to a tighter lending environment.

2 China’s productivity imperative, p.13-16.
Little scope for companies to pass on cost increases

Our respondents were united in telling us that there was little scope for customers to absorb expected cost increases. Presumably as a result of stiff competition, 58% of respondents expect that they can pass on 20% or less of rising costs to the final customer. Only a tiny 5% of respondents expected to be able to fully pass on the cost increases they expect to incur.

State-owned enterprises believed they were less able to pass on costs compared to other ownership groups. This may be the case because in a sector such as utilities, companies have less control over prices, particularly when their customers are households.

What percentage of rising costs do you expect your company to be able to pass on to your customers?

<table>
<thead>
<tr>
<th>Percentage of Rising Costs</th>
<th>1%–20%</th>
<th>21%–40%</th>
<th>41%–60%</th>
<th>61%–80%</th>
<th>81%–100%</th>
</tr>
</thead>
<tbody>
<tr>
<td>All companies</td>
<td>58%</td>
<td>12%</td>
<td>16%</td>
<td>9%</td>
<td>5%</td>
</tr>
<tr>
<td>State-owned enterprises</td>
<td>61%</td>
<td>13%</td>
<td>13%</td>
<td>8%</td>
<td>5%</td>
</tr>
<tr>
<td>Private domestic enterprises</td>
<td>56%</td>
<td>12%</td>
<td>17%</td>
<td>11%</td>
<td>4%</td>
</tr>
<tr>
<td>Foreign multinationals</td>
<td>56%</td>
<td>18%</td>
<td>29%</td>
<td>12%</td>
<td>7%</td>
</tr>
<tr>
<td>Joint ventures</td>
<td>55%</td>
<td>11%</td>
<td>20%</td>
<td>7%</td>
<td>6%</td>
</tr>
</tbody>
</table>

Source: FT Chinese, Ernst & Young

Overall, there was little variation between sectors in terms of the extent to which companies were able to pass on rising costs, suggesting that this is a pervasive issue across the Chinese economy.

In the long term, cost increases may well be good for the country because it will force the economy to become more efficient. Moreover, forcing up wages and keeping them high will drive labor productivity and create a larger domestic consumption market. Better pricing of capital and energy should also lead to better allocation of scarce resources and more balanced growth overall.

In the short to medium term, however, most companies will have to significantly lift their productivity or be prepared to concede market share to competitors in order to protect their profit margins.
Companies are well aware that in the business environment that is now emerging, continued success will demand continuous and aggressive improvement in productivity. Executives and managers across industry sectors and ownership groups overwhelmingly acknowledge the increasing significance of productivity.

Has the importance of improving productivity increased in the past two years?

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>All companies</td>
<td>91%</td>
<td>9%</td>
</tr>
<tr>
<td>State-owned enterprises</td>
<td>89%</td>
<td>11%</td>
</tr>
<tr>
<td>Private domestic enterprises</td>
<td>90%</td>
<td>10%</td>
</tr>
<tr>
<td>Foreign multinationals</td>
<td>94%</td>
<td>6%</td>
</tr>
<tr>
<td>Joint ventures</td>
<td>93%</td>
<td>7%</td>
</tr>
</tbody>
</table>

Source: FT Chinese, Ernst & Young

Nine out of ten respondents said that the importance of improving productivity has increased in the past two years. Further, 73% said productivity will be either “extremely” or “very” important to their business performance in the next 1-3 years.
Organizational capabilities to raise productivity

Companies will have to build the right capabilities on the ground

Successful productivity improvement initiatives must change the way business is done. The key will be building the right capabilities that address three key issues:

• Raising labor productivity:
  As labor costs go up, companies must ensure that they upgrade their technology, maximize the organizational efficiency of their operations across their entire supply chain, and provide the right incentives to motivate employees.

• Improving return on investment:
  Overinvestment is an economy-wide phenomenon. Companies used to cheap bank loans and readily available foreign direct investment will need to be more targeted in investments as these sources of easy finance recede.

• Ensuring quality and safety:
  As Chinese consumers grow wealthier, they will increasingly demand global standards of quality and safety. Cost of course will still play an important role, but companies can expect an upwards shift in consumer expectations as markets mature.
Operational practices of companies in China

We wanted to take our analysis a step further and find out in more detail the areas where companies need to focus to improve their productivity and therefore their profitability. To do so, we drew on our previous consulting experience in China and globally to define a comprehensive range of 30 core business and operational practices, grouped into six main competency areas, running from overall strategic alignment through process improvement to technology enablement. Put simply, these practices describe the key levers a company can use to improve operational effectiveness and productivity.¹

Measuring operational practices

For each of the 30 practices we developed a maturity profile which described a range of practices from least to most mature – or leading practice – on a scale from one to five. We then asked our respondents to self-evaluate their company against these criteria to give an overall ‘maturity’ score for each organization. The individual evaluations are, of course, subjective but given the very large survey size, the results can be interpreted with some confidence.

When we analyzed our respondents’ evaluations, we found that the correlation between the perceived sophistication of a company’s operational practices and its profitability was significant (at 95% confidence level). In other words, those companies with the highest operational practice scores outperformed their competitors.

Roughly 20% of companies within the survey did not score well in terms of operational maturity but still managed to be highly profitable. The existence of this group suggests that external discipline on companies is not strong in certain protected sectors of the economy. In other, more competitive sectors, strong competition looks to have already forced out companies with poorer operational practices.

¹ The full list of practices is set out in the Appendix.
Local firms still lag behind but the gap is closing

Foreign multinationals still have an edge over domestic companies when it comes to operational practices, but not by a big margin. In fact, just over a quarter of state-owned enterprises and private domestic enterprises now consider themselves to be the equal or superior of the average foreign multinational in terms of their overall operational effectiveness.

This is an important finding and we consider it likely that in the past decade or so there has been some degree of convergence in operational practices as domestic firms have caught up. Many domestic firms, especially state-owned enterprises, are now big enough to be able to import modern managerial methods and technologies. Export-focused industries, such as light manufacturing, have benefited from competing directly with foreign firms. Knowledge transfer has been common as managers and workers have moved between ownership groups.

Comparing ownership groups

Operational practice by ownership group

<table>
<thead>
<tr>
<th>Ownership Group</th>
<th>10 percentile</th>
<th>First quartile</th>
<th>Median</th>
<th>Third quartile</th>
<th>90 percentile</th>
</tr>
</thead>
<tbody>
<tr>
<td>All companies</td>
<td>2.20</td>
<td>2.73</td>
<td>3.23</td>
<td>3.80</td>
<td>4.30</td>
</tr>
<tr>
<td>State-owned enterprises</td>
<td>2.17</td>
<td>2.63</td>
<td>3.13</td>
<td>3.67</td>
<td>4.13</td>
</tr>
<tr>
<td>Foreign multinationals</td>
<td>2.63</td>
<td>2.97</td>
<td>3.60</td>
<td>4.07</td>
<td>4.50</td>
</tr>
<tr>
<td>Private domestic enterprises</td>
<td>2.10</td>
<td>2.73</td>
<td>3.13</td>
<td>3.68</td>
<td>4.11</td>
</tr>
<tr>
<td>Joint ventures</td>
<td>2.25</td>
<td>2.77</td>
<td>3.25</td>
<td>3.80</td>
<td>4.38</td>
</tr>
</tbody>
</table>

Source: FT Chinese, Ernst & Young
Comparing sectors

The strongest performers overall in terms of operational practices were high end sectors such as financial services and telecommunications, plus highly competitive sectors like industrial goods, which have had to do the most to upgrade their operational efficiency.

On average, industries dominated by state-owned enterprises performed more poorly. These included basic materials and utilities, although consumer services was also relatively weak overall. The biggest gains for the economy overall can be made through targeted productivity improvements in these sectors.

There was a wide range in operational performance in all sectors, suggesting that there is a lot of room for lagging companies – or ‘followers’ – to improve. The biggest gap between the top and bottom 10 percentile was found in the consumer goods and healthcare sectors, probably reflecting the rapid, recent emergence of companies in these sectors.
The transformation agenda

No silver bullet to profitable growth

Our analysis found that excellence in no one area or operational practice guaranteed profitability. In fact, when we averaged the importance of each of the six competency areas for the top performing companies, we found the weighting between each of the competencies was surprisingly equal.

However, we also found that the most profitable companies in our survey are particularly effective in striking the right balance across a number of competencies. Striking the right balance was very much contingent upon industry segment, developmental stage, and other circumstances particular to the company. In the consumer services sector, for example, customer capabilities were considered more critical whereas for a textile manufacturer, supply chain processes are more important because products are harder to differentiate and cost is a bigger factor.

The common link is that successful companies have developed systematic and comprehensive approaches to productivity improvement that build upon and reinforce each other. In other words, they have developed, and are executing on, a clear transformation agenda – transformational in the sense that productivity improvement is focused on several different competency areas in parallel, crosses traditional organizational boundaries and is intended to deliver a “step change” in overall business performance.

Such capabilities represent a form of sustainable advantage, but they must be taken to even higher levels as competition intensifies over the coming years. The underlying message that companies need to move beyond piecemeal improvements towards a more transformational approach is an important one, particularly for those companies which still have relatively undeveloped operational practices.

Five operational practices to get right

We found that among the companies surveyed, maturity in a small number of key operational practices were most highly correlated with high profitability. In other words, the most profitable companies appear to have focused on certain operational practices, and are developing strong capability in each of them, suggesting that they have magnified importance in China overall. The five most important areas are: long range strategic planning, standardization of operating processes, robust internal controls, effective workforce planning and strong technology infrastructure.

It is no surprise to see the importance of effective strategic planning in the above list, particularly in terms of organizational alignment, and the other four practices emphasize very strongly the importance of developing solid foundations to support business performance and growth in the areas of business process, internal controls, workforce planning and technology infrastructure.

We describe in more detail each of these areas in the following pages.
1. Long-range strategic planning

To become and stay successful, companies need to understand what capabilities they need to build to create competitive advantage in their sector, and then to define the priorities and actions needed to translate their strategy into measurable change on the ground.

Recently the CFO of one of China’s largest food and beverage companies resolved to improve his organization’s long-range planning. Business complexity across a growing product base had outstripped the company’s ability to conduct robust planning, and demands for investment spending far exceeded the ability of headquarters to fund these requests.

The company replaced the multiple planning models it was using with a driver-based planning and forecasting model at the business unit, sales channel, and product levels. The new planning model was designed to enable direct linkages between long range strategic planning, annual planning, forecasting, and management reporting. Financial statements were integrated to enable both valuation of baseline long-range plans and portfolio scenario analysis. Budget processes were reengineered from a top-down administrative exercise driven by arbitrary targets to a fact-based process driven by external industry trends and market demand.

These changes gave the company their first integrated, long-range view of market demand by product, including units and prices over time. Improvements in the planning processes and technology infrastructure dramatically enhanced the flexibility, accuracy, cycle time and transparency of planning and decision support processes.

At the same time, the changes freed corporate planning staff from mechanical responsibilities related to maintaining a complex array of spreadsheets and data feeds and allowed them to focus on building their analytical capabilities such as what-if analysis.

2. Standardization of operating processes

In a competitive operating environment, end-to-end standardization of operating processes enable companies to execute faster, with higher quality and at lower cost than their rivals. It is particularly important to support rapid and sustainable growth, a key feature of the China market.

An international property developer engaged us two years ago to standardize and optimize their finance function. We assessed and redesigned the organizational structure of the company’s group finance, in the process standardizing transaction processes (accounts payable, expense reimbursements, payroll, revenue accounting) and reporting (product and general account report delivery etc.).

The company managed to reduce unapplied cash, improve business performance by reducing decentralized accounting transaction error, and decrease time to close their accounting cycle by reducing the number of manual reconciliation controls. Equally important, the new processes provided a strong underpinning for future expansion and growth.

Standardizing processes to reduce waste, eliminate unneeded effort, and correct mistakes can raise productivity in all functions. Improving supplier management and purchasing operations, for example, can help organizations cut their expenditures while raising the quality of the goods and services they buy.

By combining standardization of processes with the transfer of commoditized processes to a shared service center, substantial cost reductions were realized. The company saw savings of as much as 40% in its transaction processing areas, and up to 20% reduction in the cost of reporting. Overall, the organization is on track to reduce the cost of its finance function from close to 2% to less than 0.75% of total revenue, a major productivity gain.
3. Internal controls

A strong internal control framework safeguards against unexpected financial losses that may harm a company’s reputation with customers and investors. In this area, heavily regulated and globalized industries such as financial services are being required to make big improvements. Others, especially those in the industrial sector, still have relatively undeveloped risk management capability.

Risk strategies need to be tailored because different industries have very different risk profiles. Banks, for instance, need to pay more attention to credit and market risk, whereas manufacturing companies are particularly exposed to operational risk arising from inadequate systems and processes.

We recently worked with a leading, local logistics provider in China to strengthen their internal control framework in order to meet the challenges of rapid expansion. We started off by identifying hidden sources of operational risk in sales, warehouse logistics, and inventory management.

Integrated internal controls were established in key functions – HR, procurement, cash management, and financing – as well as across business units. Once the key processes and policies were in place, we developed and delivered risk training to ensure that the company’s internal audit team could operate effectively with minimal support.

The logistics provider is now implementing a three-year risk strategy. The result will be a sophisticated risk operating model where governance structures, processes, and policies work together to give senior management oversight of both risks and returns. The example highlights how strengthening internal controls and risk management can be a powerful tool to drive improved productivity, as already recognized by our survey respondents.

4. Workforce planning

Improved workforce planning is a critical issue for companies seeking to improve their productivity. As companies evolve to meet the changing nature of demand in China, so too must their human resources. Organizations must ensure that the number and profiles of people they recruit and develop match both current and future business needs. In view of this, it is surprising that the concept of workforce planning is not yet well developed in China.

Workforce planning became a critical issue for a major resources company that had decided to invest heavily in increasing production in China over the next five years. Senior management did not, however, have a clear view of the organization’s workforce profile, and were increasingly concerned about competition for talent within the industry.

The company started off by identifying the gap between current labor supply and demand. Gap analysis was used to identify initiatives to improve workforce capability. The next step was to quantify the future state, to define labor supply and its restrictions versus work demand. The workforce planning team modeled different scenarios by job cluster to show where skills gaps were likely to emerge, taking into account the effect of new technologies to enhance productivity.

The result was the development of a five-year roadmap outlining key actions that needed to be taken for the company to meet current and future workforce requirements, including timetables for recruitment and training. For particular skill sets, options analysis identified a range of possible future operating models.

The planning project also offered a chance for the company to improve efficiency and, therefore, productivity. Targets were set for workforce performance, benchmarked against similar organizations in the same industry sector.
5. Technology infrastructure

IT investments closely aligned with sound operational practices can be a powerful driver of productivity, with benefits as wide ranging as cost reduction, faster product development, and superior business intelligence to better inform decision making.

One of the major benefits is connectivity. Many companies are actively working on putting in place unified communications and collaboration tools, but few have fully realized the potential of mobile technology to enable enterprise operations.

Consumer goods companies, for instance, are giving their sales and marketing personnel tablet computers so they can communicate effectively with headquarters whilst in the field. Transport companies are deploying advanced tools such as remote-tracking systems to provide dispatchers with real-time information on a truck’s location and load status, thus optimizing their network and improving capacity utilization.

IT infrastructure is at the same time supporting Chinese manufacturing in moving up the value chain. IT-intensive product design tools like computer-aided design packages make it easier to design customized parts and lower setup times make multiple production runs less costly. Manufacturers such as Foxconn are experimenting with automation – ‘Foxbots’ with short setup times and fast production runs. Similarly, leading e-commerce companies are increasingly using big data to rapidly harness customer information and to speed up product development cycles.

Finally, cloud computing is becoming mainstream, whether it be in the form of private cloud environments or public cloud-based infrastructure services. The biggest challenge continues to be getting the governance, operational, and service model design whilst ensuring data security and regulatory compliance.
Case study: Mondelēz International

Driving productivity improvements through process improvements

Mondelēz International, formerly part of the iconic food and beverage company Kraft Foods, is well known in China as it is around the world. It employs some 4,000 people and has operations in 250 cities in China, including eight manufacturing plants and an R&D center in Suzhou. The company has been in China for more than 29 years.

Albert Hsieh, the head of the company’s Information Systems division, has been with the company for eight of those 29 years. Last year he led an ambitious in-country program aimed at simplifying and improving operational processes across divisional lines. The program was in response to the company’s rapid growth in China in recent years. Operational capabilities were lagging behind the pace of revenue growth, geographical expansion, and the integration of acquisitions. Mr Hsieh comments, “The management team found that they were busy firefighting rather than dealing with core issues.”

The program aimed to raise the productivity of core business processes through process innovation and technology enablement. Fixating on auxiliary processes often yields smaller returns and can sometimes run counter to the goal of simplification. So from more than 100 ideas generated by different parts of the business, just five simplification areas were chosen as pilot initiatives.

The success of these initiatives, ranging from the streamlining of order processes to centralization of the HR function, returned immediate dividends to the business and built confidence in the program. Each initiative was evaluated on its “saving hours”, the number of personnel hours saved. After all, what gets measured gets done. Mr Hsieh says that implementing workforce management across the company’s eight manufacturing plants in China has huge potential to save personnel hours and reduce payroll costs.

The next step will be to build a culture of continuous improvement because simplification should be seen as a continuous and long-term goal that leads naturally to higher quality of output and lower manufacturing cost. The process improvements going ahead this year include even more ambitious initiatives in sales efficiency, manufacturing operational excellence, procurement-to-pay process upgrading, and moves toward a paperless HR lifecycle.

“The good thing is,” Mr Hsieh says, “we have a proven methodology based on sustained focus from upper management and ongoing revision of incentives and metrics.”
Case study: China UnionPay

Enabling growth through targeted investments in technology

China UnionPay is China's dominant payment card supplier. It has issued some 3.5 billion credit cards to date, making it the third largest credit card organization in the world. UnionPay also operates the unified interbank clearing and settlement system in China as well as an EFTPOS network. In recent years, the company has sped up its expansion overseas — its cards are now accepted in some 141 jurisdictions worldwide.

Chai Hongfeng, UnionPay's CIO and Executive Vice President, says of the company's leapfrogging progress: “Information technology has always been one of our core competitive advantages. UnionPay is committed to product innovation, and to stimulating market development through industry alliances under the principle of 'open cooperation, mutual benefit.'”

Mr Chai points to mobile internet, cloud computing, and natural user interface (NUI) as the most promising IT developments for his company. UnionPay’s wide-ranging technology partners include some of the biggest names in the industry: Samsung, HTC, ZTE, Huawei, among others.

The company recently announced it will be cooperating with Intel to optimize service levels on personal computers, mobile devices, and other smart payment terminals. The two sides will also explore the joint establishment of payment security standards and carry out application cooperation based on cloud computing, big data and other emerging information technologies. Another significant achievement has been the creation of the UnionPay Quick Pass, China’s very own near-field communications (NFC) payment service with over 1.2 million terminals as of March 2013.

Mr Chai also sees great potential in partnering with industry on 'big data'. The company facilitates tens of billions of transactions annually, the vast majority by urban consumers. Segmentation is a well known concept in marketing, of course, but the sheer volume of real-time data held by UnionPay makes it possible to implement timely microsegmentation of customers to target promotions and advertising. Detailed analysis of that data using predictive tools can show subtle changes in consumer behavior many months before they became apparent more widely.

In short, exploiting transaction data can help companies target customers better and increase the quality (and therefore price) of their products — both resulting in greater productivity.

UnionPay, well aware of the possibilities, was an early mover in developing a ‘big data’ strategy. Its Bankcard Consumer Confidence Index (BCCI), jointly compiled since 2009 with Xinhua News Agency, is already acting as a barometer of consumer confidence and a reference point for policy and investment decisions by government and enterprises.

Security is the big challenge. According to a recent survey, 93% of respondents in China consider security to be a key concern in adopting mobile payments.4 With this in mind, UnionPay is working on system interoperability, operational guidelines, and technology standards and specifications that will see it through its next decade of growth and continued productivity improvement.

4 Online survey by TNS of 1300 respondents, completed in December 2012 covering Beijing, Shanghai, Hebei, Liaoning, Jiangsu, Zhejiang, Shandong, Guangdong, Hubei, Sichuan and Shaanxi.
Barriers to improving productivity

Every organization faces barriers to improving productivity. Our survey results point to the importance of human resources and governance issues when it comes to achieving long term improvements in organizational productivity.

When asked what barriers they faced to improving productivity, the barrier that was most often cited – by more than half of respondents – was unclear accountability. This is a clear priority for management attention and links to the importance of strategic alignment as highlighted previously. 43% identified a shortage of labor or management talent, followed by 34% who said overly centralized control from headquarters constrained their ability to drive productivity improvement.

What barriers are most likely to hamper your organization’s efforts to improve productivity?

- Unclear accountability: 53%
- Shortage of labor or management talent: 43%
- Overly centralized control from headquarters: 34%
- Lack of communication between management and workforce: 31%
- Inappropriate business model: 30%
- Incompatible information systems: 26%
- Excessive government regulation: 24%
- Managers’ lack of access to up-to-date productivity information: 23%
Looking ahead

Improving operational practices to lift productivity

Productivity is of central importance to China if it is to keep growing and avoid the much discussed ‘middle income trap’. Whilst there is a great deal of discussion about moving up the value chain and technological upgrading, we argue that just as — if not more — important will be the systematic achievement of operational improvements at firm-level.

Our research shows that whilst about a quarter of local firms believe that their operational and management performance is similar to that of the average foreign multinational, there is still a sizeable gap overall — and therefore a sizeable opportunity. For the national economy, exploiting this gap can be an important source of domestic-oriented growth as China evolves from its former export-oriented model.

Lower quality of management will, on the other hand, act as a constraint on growth. Less efficient companies are more wasteful when it comes to using national resources, and get less benefit from each dollar of infrastructure spending.

Improving operational practices may therefore represent the single biggest driver of productivity gains over the next decade. The encouraging message here is that these improvements do not typically require significant financial investments, although they do need significant leadership involvement and commitment to drive through change. Furthermore, these improvements can be applied across all sectors of the economy and many of the lessons can be readily transferred and replicated between companies.

Not only will better management lead to higher growth in the long term, it will also mean higher per capita incomes, less pollution, as well as improved safety, healthcare, and education.

Implications for companies

Performance gaps will likely continue to grow as competition intensifies in China. In a number of industries, such as automotive and machinery manufacturing, consolidation is already well under way.

For companies, survival and success will depend on upgrading productivity through integrated, targeted operational initiatives that can drive year-on-year performance improvements. We have seen from our survey that top performing companies are already adopting a broad, transformational approach to productivity improvement, with a strong emphasis on strategic alignment and on putting in place the critical foundations — standardized processes, robust internal controls, effective workforce planning and technology infrastructure — needed to support continued profitable growth.

Leaders at all levels need to consider how their organizations can immediately start to build and implement the capabilities that will be essential to meet the challenges of China’s productivity imperative, as well as tackling some of the barriers to change which we have also identified in this report.
# Appendices

## Survey demographics

### Sectors

<table>
<thead>
<tr>
<th>Sector</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic material</td>
<td>7.7%</td>
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<tr>
<td>Industrial goods</td>
<td>16.3%</td>
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<tr>
<td>Consumer goods</td>
<td>11.8%</td>
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<tr>
<td>Healthcare</td>
<td>6.1%</td>
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<tr>
<td>Consumer services</td>
<td>10.7%</td>
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<tr>
<td>Telecommunications</td>
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<tr>
<td>Utilities</td>
<td>8.4%</td>
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<tr>
<td>Financial services</td>
<td>19.6%</td>
</tr>
<tr>
<td>Technology</td>
<td>11.9%</td>
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### Job title

<table>
<thead>
<tr>
<th>Job title</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>C-level executive</td>
<td>9.1%</td>
</tr>
<tr>
<td>Senior vice president</td>
<td>10.8%</td>
</tr>
<tr>
<td>Head of business unit</td>
<td>20.7%</td>
</tr>
<tr>
<td>Head of department</td>
<td>37.2%</td>
</tr>
<tr>
<td>Senior manager</td>
<td>22.1%</td>
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### Ownership group

<table>
<thead>
<tr>
<th>Ownership group</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>State-owned enterprises</td>
<td>42.5%</td>
</tr>
<tr>
<td>Private domestic enterprises</td>
<td>25.0%</td>
</tr>
<tr>
<td>Foreign multinationals</td>
<td>20.4%</td>
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<tr>
<td>Joint ventures</td>
<td>12.1%</td>
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</tbody>
</table>

### Number of employees

<table>
<thead>
<tr>
<th>Number of employees</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>500-1000</td>
<td>14.5%</td>
</tr>
<tr>
<td>1000-1999</td>
<td>13.7%</td>
</tr>
<tr>
<td>2000-2999</td>
<td>12.9%</td>
</tr>
<tr>
<td>3000-9999</td>
<td>26.9%</td>
</tr>
<tr>
<td>More than 10000</td>
<td>32.0%</td>
</tr>
</tbody>
</table>

### Total assets (in CNY)

<table>
<thead>
<tr>
<th>Total assets (in CNY)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 million</td>
<td>5.0%</td>
</tr>
<tr>
<td>100-499 million</td>
<td>11.3%</td>
</tr>
<tr>
<td>500-999 million</td>
<td>9.9%</td>
</tr>
<tr>
<td>1-4.9 billion</td>
<td>20.7%</td>
</tr>
<tr>
<td>5-9.9 billion</td>
<td>13.9%</td>
</tr>
<tr>
<td>10-49 billion</td>
<td>12.4%</td>
</tr>
<tr>
<td>50-99 billion</td>
<td>7.9%</td>
</tr>
<tr>
<td>100 billion or more</td>
<td>18.8%</td>
</tr>
</tbody>
</table>

### Revenue in China (in CNY)

<table>
<thead>
<tr>
<th>Revenue in China (in CNY)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 100 million</td>
<td>6.2%</td>
</tr>
<tr>
<td>100-499 million</td>
<td>15.5%</td>
</tr>
<tr>
<td>500-999 million</td>
<td>11.5%</td>
</tr>
<tr>
<td>1-4.9 billion</td>
<td>23.0%</td>
</tr>
<tr>
<td>5-9.9 billion</td>
<td>11.6%</td>
</tr>
<tr>
<td>10-49 billion</td>
<td>14.1%</td>
</tr>
<tr>
<td>50-99 billion</td>
<td>6.9%</td>
</tr>
<tr>
<td>100 billion or more</td>
<td>11.1%</td>
</tr>
</tbody>
</table>
## List of operational practices surveyed

### Strategic direction
- Long-range strategic planning
- Business forecasting
- Scenario contingency planning
- Organizational alignment
- Managing asset and capital efficiency

### Customer
- Customer segmentation
- Marketing productivity
- Pricing
- Order-to-cash processes
- Customer experience improvement

### Execution
- Standardization of operating processes
- Tax-effective operations
- Enterprise cost reduction
- Outsourcing
- Shared service centers

### People and organization
- Workforce planning
- Performance management
- Employee incentives
- Intraorganizational communication
- Decentralization of authority

### Risk and control
- Business performance reporting
- Benchmarking
- Risk governance
- Enterprise risk management
- Internal controls

### Technology and data
- Enterprise architecture
- Technology infrastructure
- Data alignment
- Business intelligence
- Decision support systems
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